SMARTWaste Plan

The Site Waste Management Plan and Waste Measurement Tool from BRE

User Guide

www.smartwaste.co.uk/swmp

Version 3

Date: 2 April 2009

bre

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1. Introduction

SMARTWaste Plan is a free software tool for preparing, implementing and reviewing Site Waste Management Plans (SWMPs). It is user friendly with either a downloadable template or an interactive web session to guide you through the steps to completing a SWMP.

SMARTWaste Plan includes an optional integrated online waste measurement tool to help you easily measure and monitor the types and amounts of waste leaving sites and benchmark your performance with waste on individual sites and on a company-wide basis. This waste measurement tool is an improved and updated version of our old SMARTStart tool. Now, with SMARTWaste Plan you will only need one account to create SWMPs for your projects and also measure waste generated by them.

This user guide will provide you with an introduction to the features and functions of SMARTWaste Plan. We hope it can give the necessary information you need to begin using this tool on your sites. If you have any questions regarding SMARTWaste Plan which are not answered by this user guide, please do not hesitate to contact the SMARTWaste Team at BRE on 01923 664851 or 01923 664633 or smartwaste@bre.co.uk.

Please note: *This is the 3rd version of this user guide, which includes details of new features, functions and refinements made to SMARTWaste Plan since June 2008 including:*

- waste management contractors function updated to enable recording of both generic overall and product specific recycling rates for the waste sites/facilities
- company admin users can now amend incorrect waste data via the waste data log page
- a cost log has been added to enable review of all cost data entered (similar to the waste data log), company admin users can also amend cost data via the cost log
- step 4 of the SWMP (waste management options) has been updated to speed up data entry, now both onsite and offsite options for each waste type can be entered at the same time.

Additional features coming to the tool soon:

- improved print out version of the SWMP
- revised layout of company and project homepages
- online step-by-step visual tutorials
- graphs on step 7 of the SWMP to show how much waste has been generated against your forecast amounts
- company's own benchmarking calculator (based on previous data if available).

Additional SMARTWaste Plan services now available to purchase (see Appendix 2 for further details):

- If you have a number of business units, regional offices or divisions and would like to be able to show data at a business unit level or regional level (i.e. adding an extra reporting tier), you can purchase a *Group Level SMARTWaste Plan* for a one-off fee (£1500 + VAT).
- If you have a number of contractors who are using SMARTWaste Plan and you would like to view all your project data from one location, you can purchase a *Client Level SMARTWaste Plan* for a one-off fee (£3000 + VAT).
- If you would like other changes to suit your company's specific needs, we can create a *bespoke version of the tool* for you at a small cost.
- Training on SWMPs and SMARTWaste Plan.

We update our SMARTWaste website regularly; you can visit www.smartwaste.co.uk to find out the latest news, briefings and waste benchmarks as well as details of SWMP training and additional SMARTWaste services.

If you have any queries or feedback, please do not hesitate to contact us at smartwaste@bre.co.uk.

2. Managing your online SMARTWaste Plan account

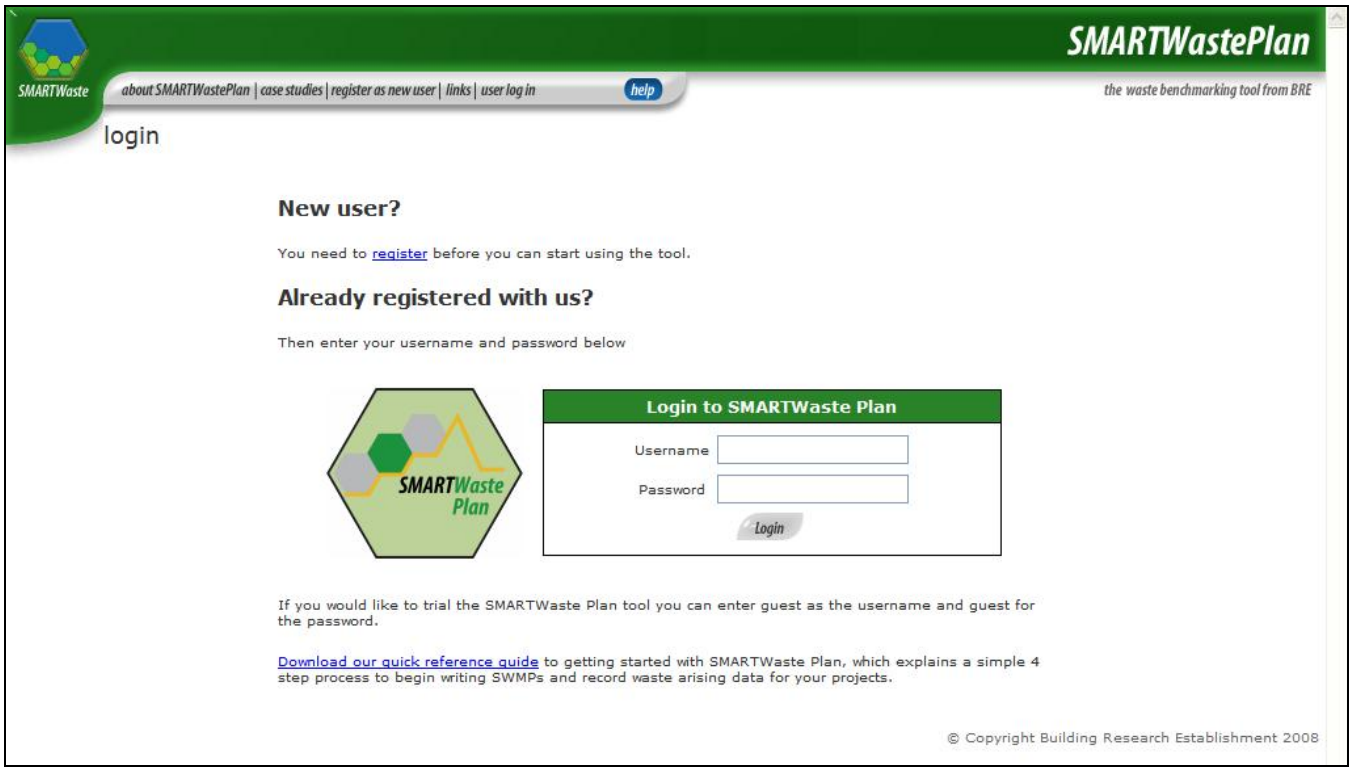
2.1. Logging in

SMARTWaste Plan is accessed through www.smartwaste.co.uk/swmp. You log in to your SMARTWaste Plan account using unique usernames and passwords (figure 2.1). Logging in will take you to your company homepage (see section 2.3).

On the login page (figure 2.1), you can download our quick reference guide to getting started with SMARTWaste Plan, which explains a simple 4 step process to begin writing SWMPs and record waste arising data for your projects.

The tool is set up so that you can view overall summary information for your company as a whole, and then drill down to view individual project/site data and SWMPs.

Figure 2.1: SMARTWaste Plan login page


SMARTWastePlan
SMARTWaste
about SMARTWastePlan | case studies | register as new user | links | user log in
help
the waste benchmarking tool from BRE
login
New user?
You need to register before you can start using the tool.
Already registered with us?
Then enter your username and password below
Login to SMARTWaste Plan
Username
Password
Login
If you would like to trial the SMARTWaste Plan tool you can enter guest as the username and guest for the password.
Download our quick reference guide to getting started with SMARTWaste Plan, which explains a simple 4 step process to begin writing SWMPs and record waste arising data for your projects.
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When you register your company as a new user you allocate yourself a username and password. These are your company admin log on details which allow you to fully set up and manage your account including editing your company details, adding projects, users, SWMPs, waste management contractors, subcontractors and waste data. It is recommended that you assign the responsibility of using the company admin login to one person so that the creation of projects and users is managed to ensure their set up is completed properly.

You can set up other users within your SMARTWaste Plan account who you can grant a particular access level with specific permission enabling them to perform certain functions (see section 2.5 for details on how to do this).

2.2. SMARTWaste Plan toolbar

The toolbar appears at the top of every page in SMARTWaste Plan (figure 2.2) and can be used to navigate around your account.

Figure 2.2: SMARTWaste Plan toolbar

SMARTWaste
about SMARTWastePlan | case studies | company menu... | project home | links | log out...
help
SMARTWastePlan
the waste benchmarking tool from BRE

2.3. Company Homepage

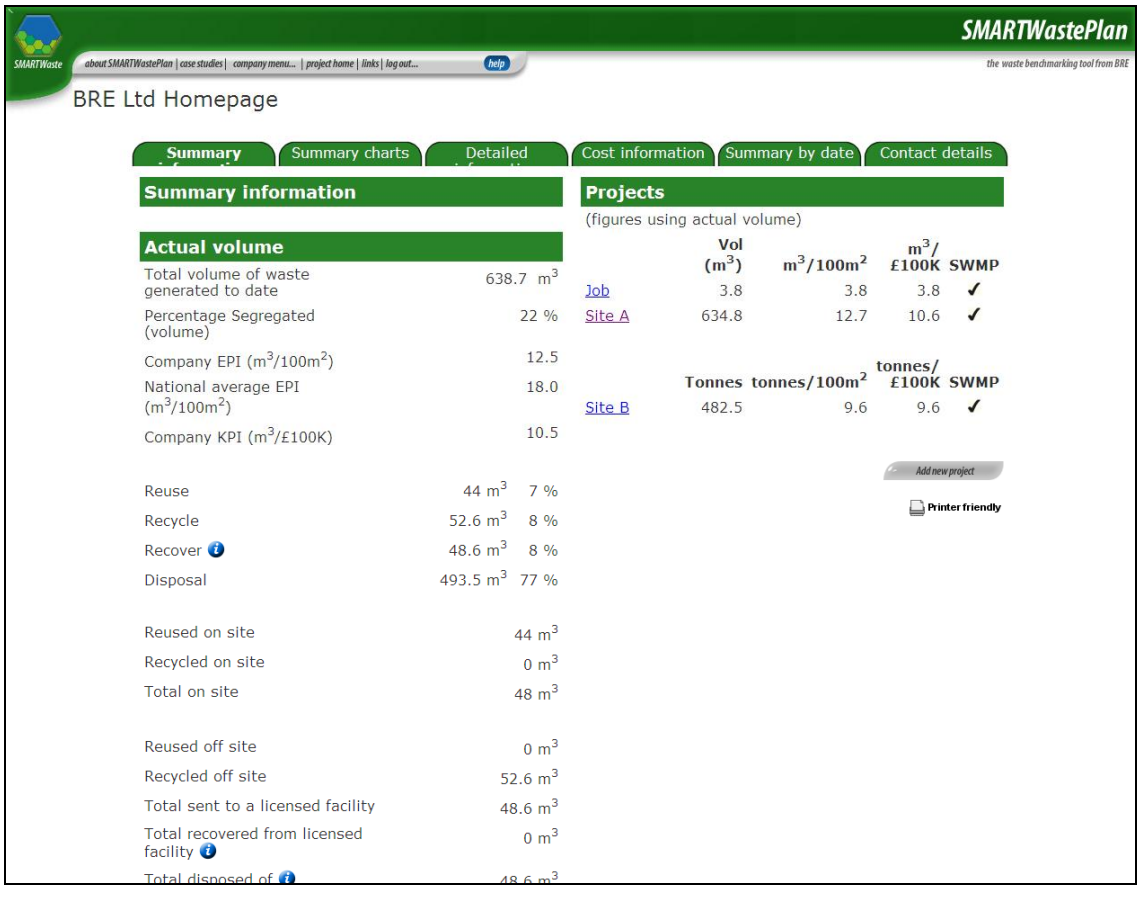
The company homepage provides you with an overview of information for your whole company through a number of tabs. Whenever you login to SMARTWaste Plan, you are automatically taken to the 'Summary Information' tab (figure 2.3).

From here, you add new projects so that you can create a SWMP for the project and start collecting waste data (see sections 2.4, 5 and 6 for details).

This tab summarises the total waste data for your whole company in actual volume, bulk volume and tonnage, and cost Key Performance Indicators (KPIs). It lists all the projects you have set up, whether they are collecting waste data in volume or tonnes, completed or live and the type of SWMP they have.

The type of SWMP a project has is shown by the colour of the tick. A grey SWMP tick is given for projects using the downloadable word template SWMP. A black SWMP tick shows projects using the online SWMP.

Figure 2.3: Sample of the Company Homepage 'Summary Information' tab


SMARTWastePlan
the waste benchmarking tool from BRE
BRE Ltd Homepage
Summary
Summary charts
Detailed
Cost information
Summary by date
Contact details
Summary information
Actual volume
Total volume of waste generated to date 638.7 m3
Percentage Segregated (volume) 22 %
Company EPI (m3/100m2) 12.5
National average EPI (m3/100m2) 18.0
Company KPI (m3/£100K) 10.5
Reuse 44 m3 7 %
Recycle 52.6 m3 8 %
Recover 48.6 m3 8 %
Disposal 493.5 m3 77 %
Reused on site 44 m3
Recycled on site 0 m3
Total on site 48 m3
Reused off site 0 m3
Recycled off site 52.6 m3
Total sent to a licensed facility 48.6 m3
Total recovered from licensed facility 0 m3
Projects
(figures using actual volume)
Vol (m3) m3/100m2 m3/£100K SWMP
Job 3.8 3.8 3.8
Site A 634.8 12.7 10.6
Tonnes tonnes/100m2 tonnes/£100K SWMP
Site B 482.5 9.6 9.6
Add new project
Printer friendly

2.4. Adding projects

To add projects to your SMARTWaste Plan account, press the 'Add new project' button under the 'Projects' section of the company homepage 'Summary Information' tab page (figure 2.4). This takes you to the 'Add/Edit project details' page (figure 2.5).

Figure 2.4: Company Homepage - 'Add new project'

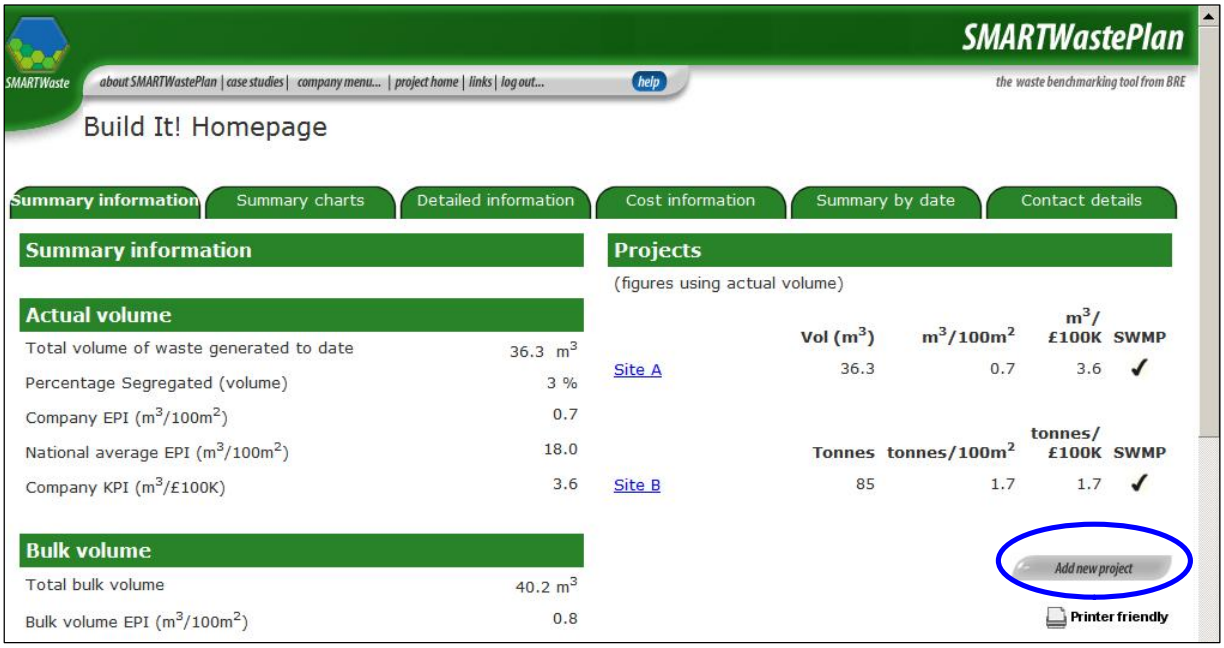
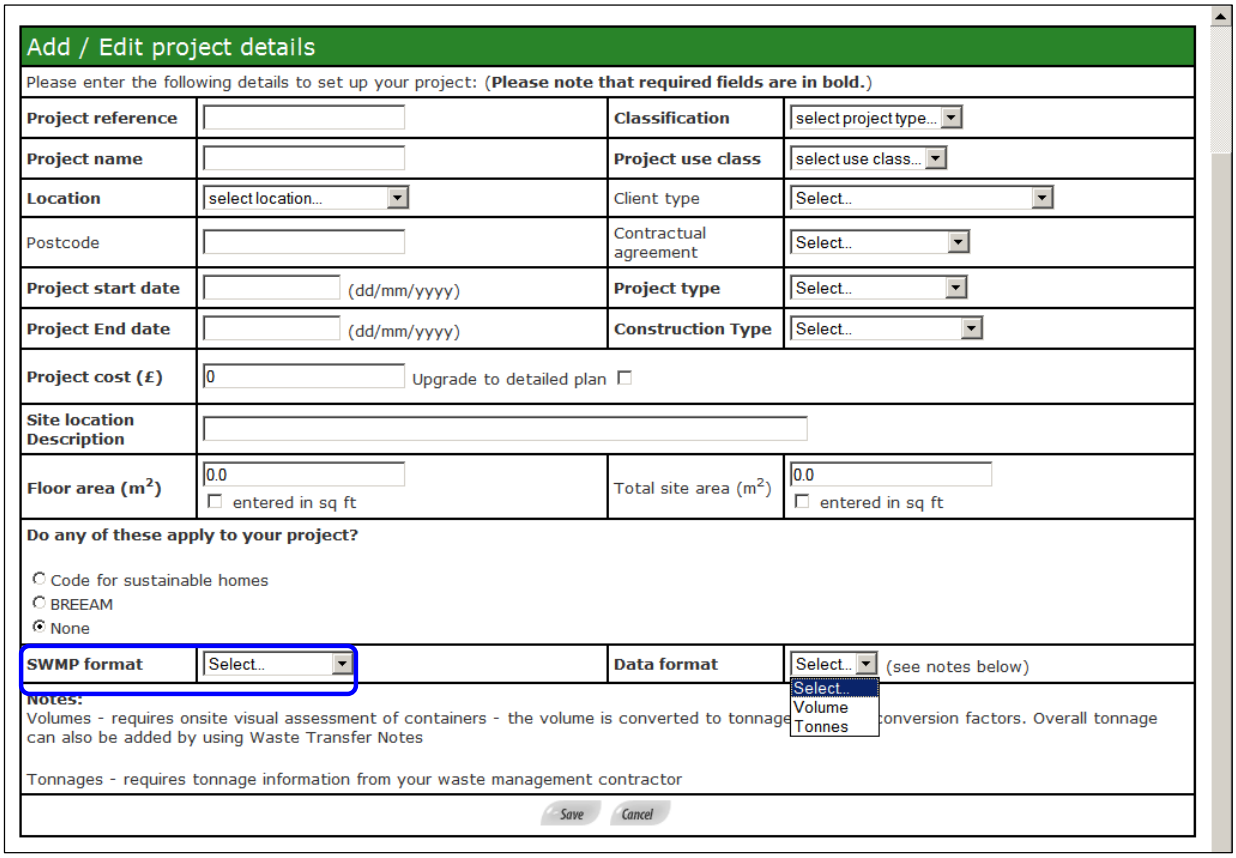


Figure 2.5: The Add/Edit project details page



Fill in the form (figure 2.5); further details are given below about the important sections of this form. When the form is complete, click the 'Save' button to create your project; this will take you into that new project's homepage (see section 4).

2.4.1. Project cost and floor area

Please make sure you add the correct figures for project cost (£) and floor area[1]. Please use numbers only; do not use £ signs, commas or letters. If you are entering the floor area as square feet, the tool will automatically convert this into square metres if you tick the box labelled 'entered in sq ft'.

It is very important to fully complete the project cost and floor area fields as this information is essential for the system to calculate your performance indicators either in:

- Volume: m^3 of waste/100m^2 of floor area, m^3 of waste/£100,000 project cost, or
- Weight: tonnes of waste/100m^2 of floor area, tonnes of waste/£100,000 project cost.

2.4.2. Data Format

You will need to choose whether you will be collecting and recording all waste data as volume or tonnes. Important note: once you have selected the data format for a project (either in volume or in tonnes), and you have started to add waste data, *the data format cannot be changed*, you must keep using the same format to collect waste data.

If you choose to collect waste data in tonnes, some waste mangement contractors may be able to give you the tonnes for each waste material if there is more than one material in a container which is being segregated offsite. But this information is likely to be less detailed than the volume based information. For the Code for Sustainable Homes you have to report by waste types (e.g. timber, packaging, insulation) so if you measure in tonnes you will need to ensure that you can obtain this information from your waste management contractors.

2.4.3. SWMP format: Online format or downloadable template

There are two options for the format of your SWMP; either an interactive online SWMP or a downloadable word template. We recommend using the interactive online version as this has additional features such as reporting, waste benchmark calculator tool and the integrated waste measurement tool.

2.5. Adding users

When registering for SMARTWaste Plan you will have set up your own company admin username and password. These company admin login details enable you to add projects and users to the system as well as to amend incorrect waste data and cost data.

You can add as many other users to the system as you like, giving them their own usernames and passwords. To add users, select 'add/edit users' from company menu (figure 2.6). This takes you to the 'Add/Edit user details' page (figure 2.7). On this page the new users details can be added or current users details can be edited.

Remember that for each new user you add, you will need to select a user access permission level based on the functions you want them to be able to complete. Please see table 2.1 for the list of user levels and an explanation of their associated permissions. This table can also be downloaded from the 'Add/Edit user details' page (figure 2.7).

After adding new users, you must grant them access to the projects they will be using (see section 4.2 for details on how to do this).

[1] As a simple check, we would expect the project cost to be around between £300/m^2 and £3500/m^2

Figure 2.6: Company Homepage - Add users

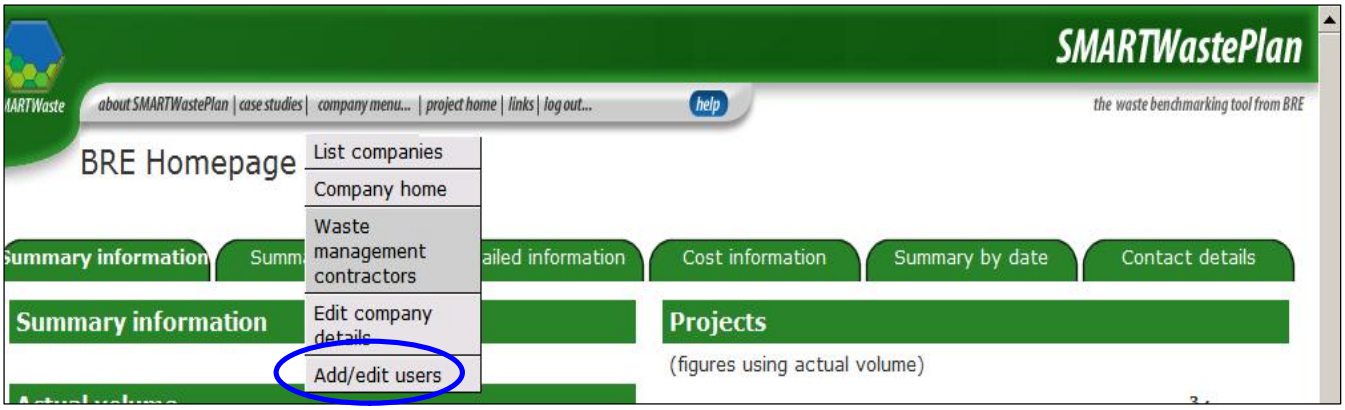


Figure 2.7: Add/Edit user details page

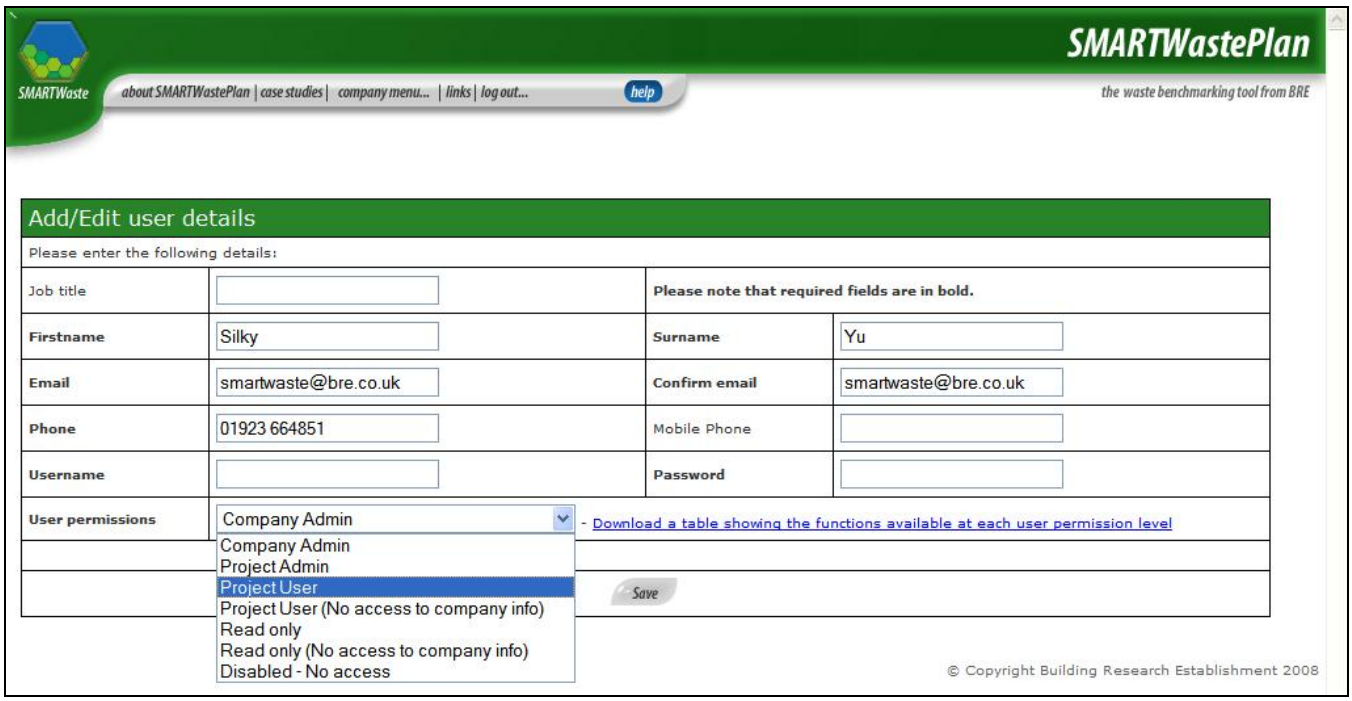


Table 2.1: SMARTWaste Plan user access/permission levels

(Summary of functions available at each user permission level)

User Type	Brief description	Add waste/ cost data	Add & update subcontractors and waste management contractors	Add users	Update users	Edit project details	Add projects	Amend waste data and cost data
Company Admin (Top level) *[for Group Level SMARTWaste Plans only]*	access to all info for business units and projects	√	√	√ (of same level or lower)	√	√	√	√
Company Admin	access to all data for the company and all projects	√	√	√ (of same level or lower)	√ (of same level or lower)	√ (all projects)	√	√
Project Admin	view company data and access to specified projects	√	√	√ (of same level or lower)	√ (of same level or lower)	√ (specified projects only)	x	x
Project User	view company data and access to specified projects	√	√	x	x	x	x	x
Project User (No access to company info)	can't view company data but can access specified projects	√	√	x	x	x	x	x
Read only	can read company data and specified projects data but can't add data	x	x	x	x	x	x	x
Read only (No access to company info)	can read specified projects data but can't add data	x	x	x	x	x	x	x
Disabled - No access	no access to anything, can't log on e.g. to disable access for someone who has left the company	x	x	x	x	x	x	x

Key: √ User has permission to perform this function (may be restrictions though, see notes in brackets)

X User does not have permission to perform this function

2.6. Adding waste management contractors

Waste management contractors and their waste sites must be added at the company level before they can be assigned to a project.

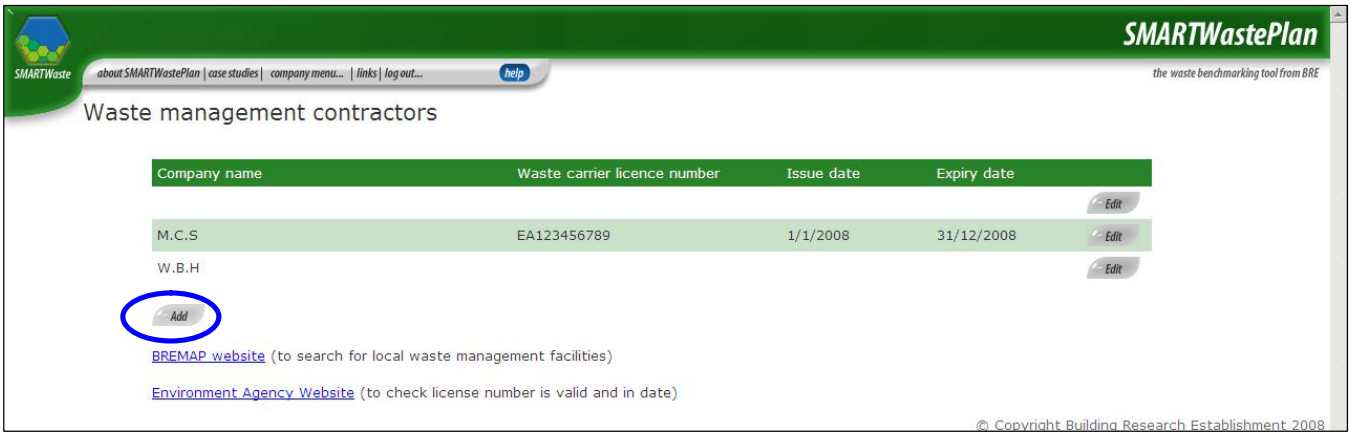
- Select waste management contractors from the 'company menu' (see figure 2.8)
- This takes you to the add/edit waste management contractors page (figure 2.9)
- Click 'Add' and fill in the form (figure 2.10) with the waste contractor's contact details, make sure you tick which activity they do (you can select more than one)
    - carrier – only moving/transporting your waste (i.e. haulage)
    - broker – arranging waste management with other waste contractors on your behalf
    - facility – waste site/facility e.g. waste transfer station
    - reprocessor – direct recycler of specific waste stream e.g. metal merchant
- When finished, click the 'save' button to set up the waste contractor. Tables then appear based on the activity options you ticked. Click on the 'add' buttons under 'waste carrier licences' and 'waste sites' to complete the tables (figure 2.11). Please note: you have a responsibility under the Waste Duty of Care Regulations, to be checking out the waste carrier and waste site/facility details and licence numbers (see section 5.3.2 'Step 5 - Duty of Care' to find out more details).
- Once the waste site/facility details are set up, you can enter an overall recycling rate and if required or known, recycling rates by waste product type (figure 2.12, 2.13 and 2.14). If using the recycling rates by waste product type and only a few are entered, for those waste products with no individual recycling specified, the system will assume the 'overall recycling rate' applies for those waste products.

Note:

- The recycling rates entered here are linked to the 'Add waste data' page (see section 6.1.2) so that for any containers marked as being sent for ***recovery offsite*** using the waste site/facility, a proportion of that waste is classed as being recycled (using the recycling rate percentage) and is therefore added to your total recycled figure for that project.
- Ensure that recycling rates do not overlap the same period e.g. overall recycling rate 80% to cover 1/1/2009 - 31/1/2009 and another overall recycling rate 85% to cover 15/1/2009 - 31/1/2009. If recycling rates overlap the same period, the tool will add up the recycling rates for the period leading to an incorrect 'Total recovered from licensed facility' figure on the project homepage (e.g. 80% + 85% = 165%).
- Ensure that at least overall recycling rates are added to cover any periods for which you have entered unsegregated/mixed waste data as being sent for recovery offsite. If there are no recycling rates for the dates in question, the tool will assume that all of the waste went to landfill (disposal) even though the recovery option was selected.

Figure 2.8: Accessing Waste Management Contractors function

Figure 2.9: Add/edit waste management contractors



Note:

- A link is provided to the Environment Agency's website so that you can check whether the licence numbers you have entered are valid and in date – this is an important part of your Duty of Care as a waste producer.
- There is also a link to the BREMAP website where you can search for local waste management facilities for free.

Figure 2.10: Add waste management contractor details

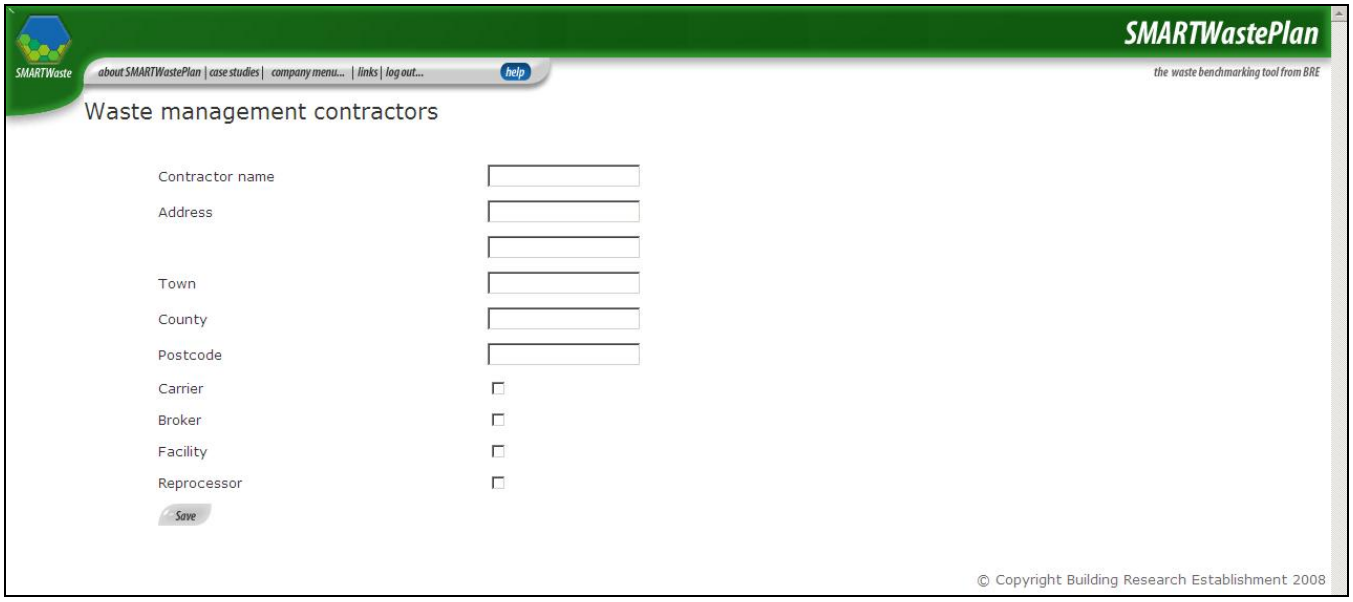


Figure 2.11: Add waste carrier and waste site/facility details

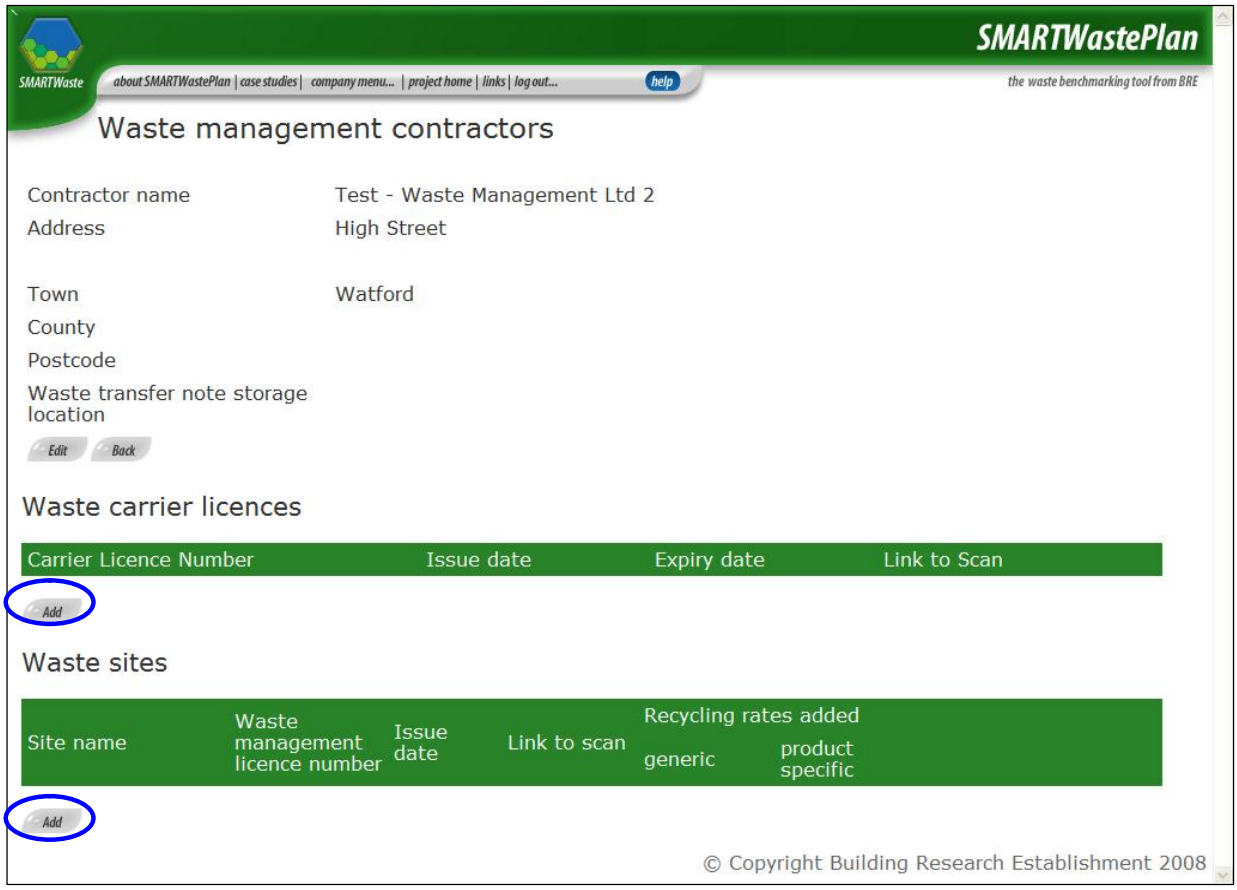


Figure 2.12: Add waste site/facility recycling rate

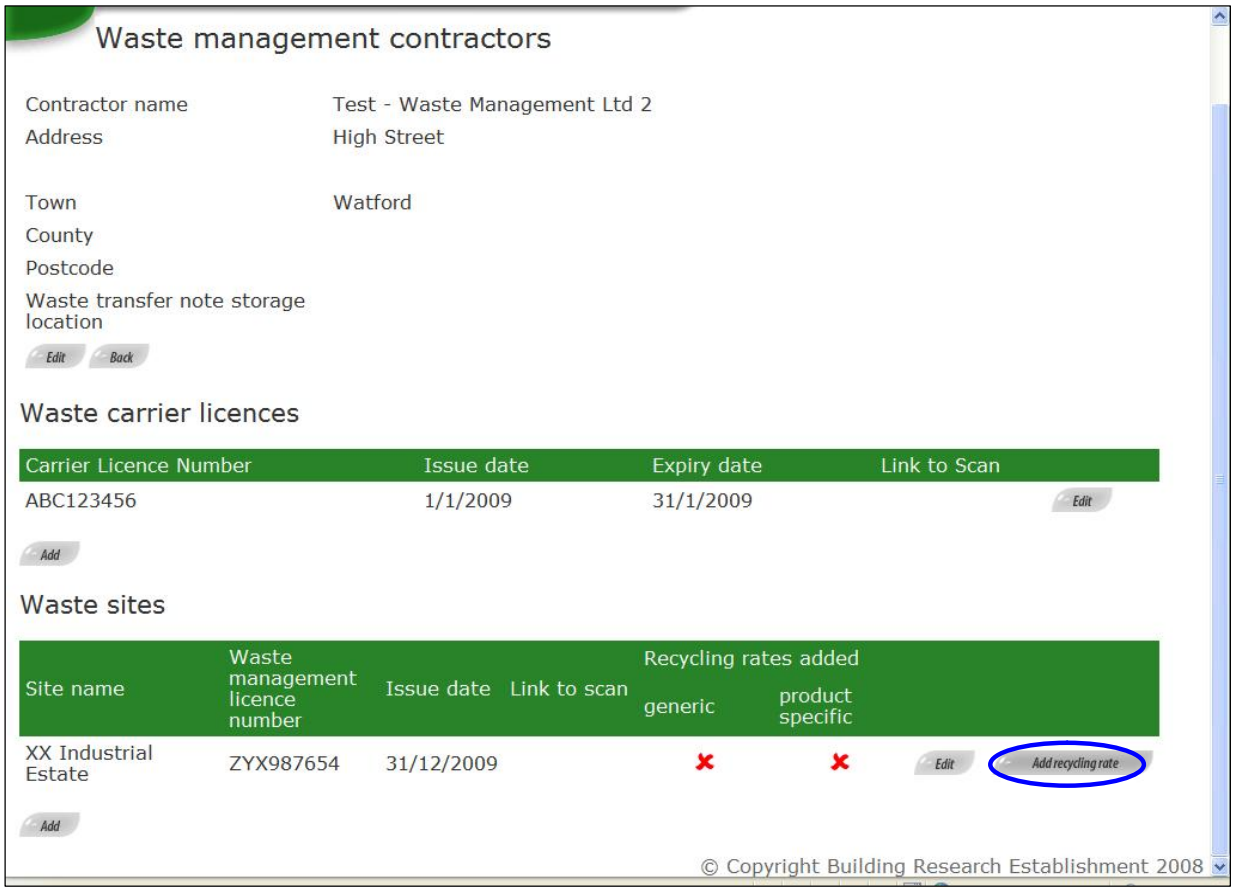


Figure 2.13: Add/edit your waste site/facility recycling rates (overall and by waste product)

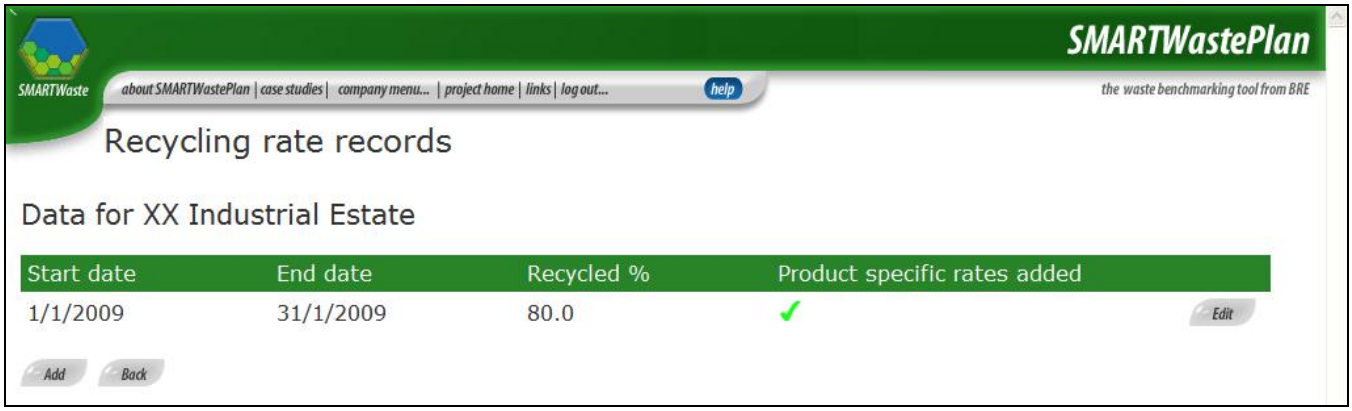
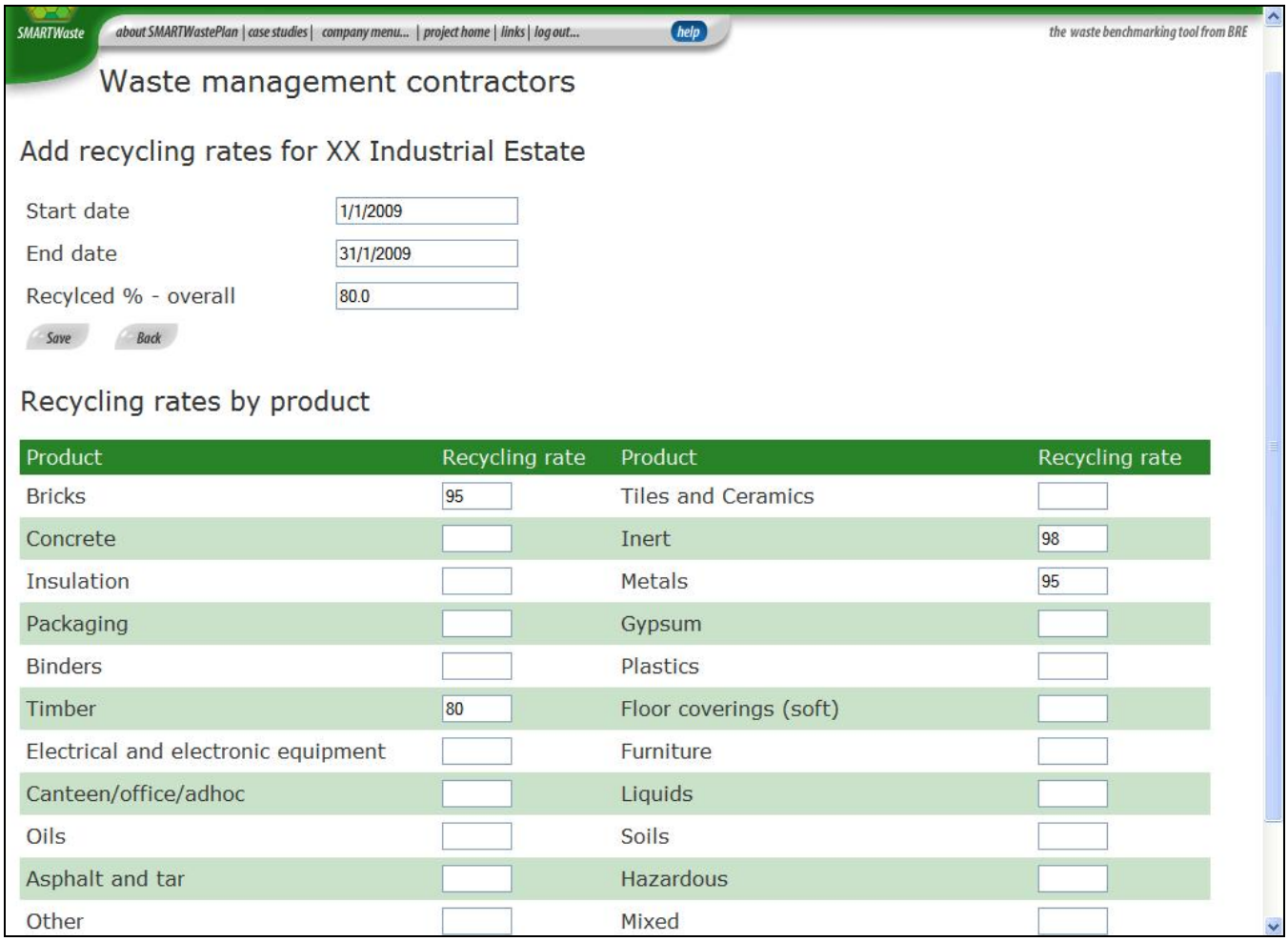


Figure 2.14: Add waste site/facility recycling rates (overall and by waste product)



Once you have completed inputting recycling rates for the site (figure 2.14) click the 'Save' button. Then click 'Back' to return to the overview page for recycling rates (figure 2.13) where you can review the waste site/facility overall recycling rates (figure 2.14). To view the recycling rates by waste product again, click the 'Edit' button shown in figure 2.13. To add more recycling rates for different periods, click on the 'Add' button again shown in figure 2.13.

The waste management contractors are now ready to be assigned to the relevant project (see section 4.3).

2.7. Adding Subcontractors

Subcontractors must be added at the company level before they can be assigned to a project:

- Select 'subcontractors' from the company menu (figure 2.15)
- This takes you to a page where you can add new subcontractors (figure 2.16)
- Click on ‘add’ and fill in the form, then click ‘save’ when complete (figure 2.17).

The subcontractors are now ready to be assigned to projects (see section 4.4 for details).

Subcontractors can also be linked with waste arisings on the 'add waste data' page of a project (see section 6.1) and with some sections of the SWMP (see section 5.3.1).

Figure 2.15: Accessing subcontractors function

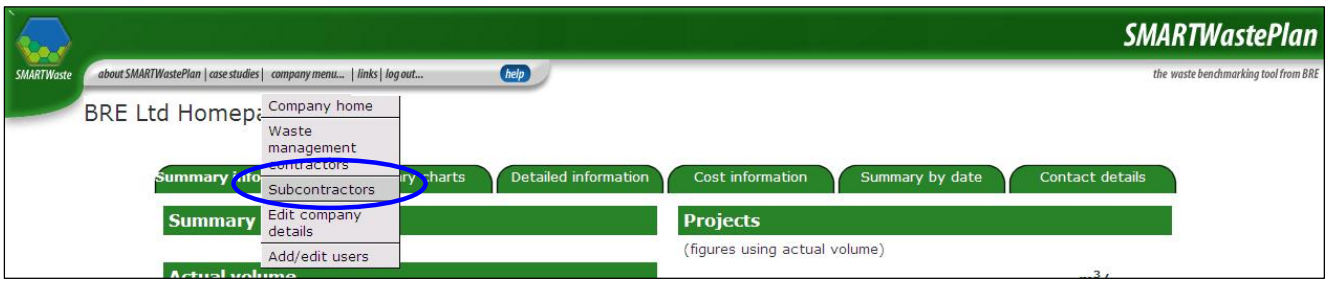


Figure 2.16: Add/edit subcontractors page

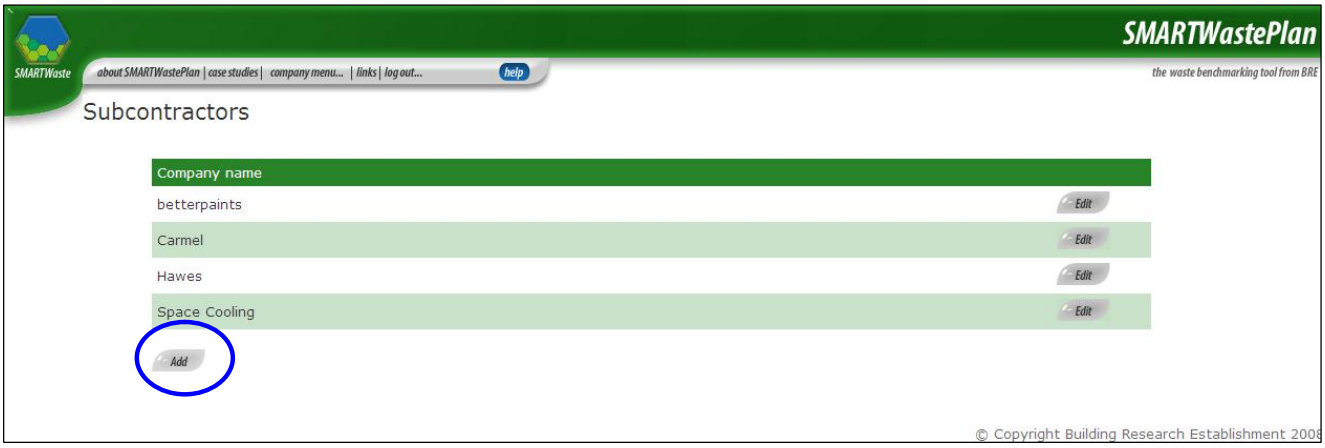
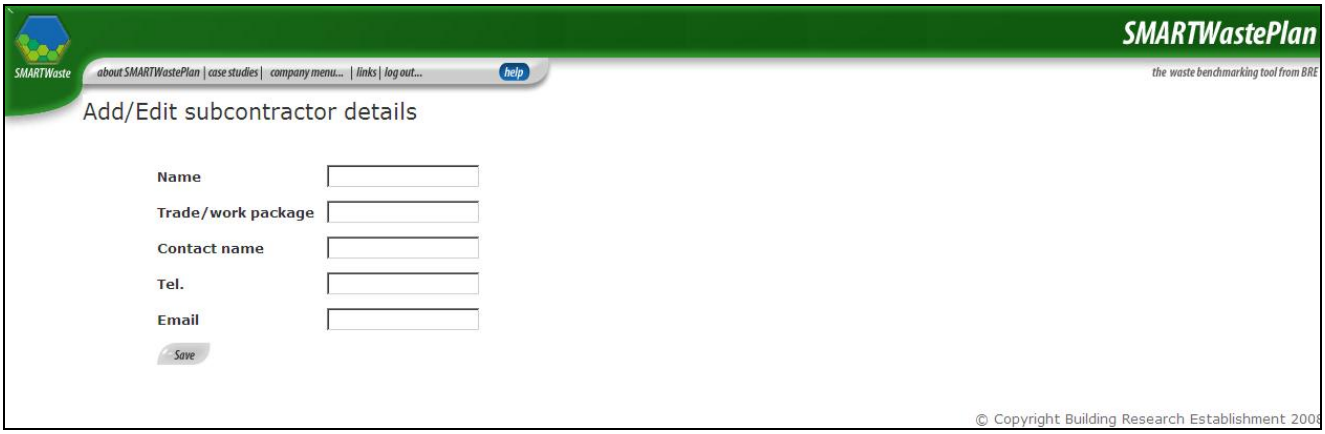


Figure 2.17: Add subcontractors details



2.8. Editing company details

If your company details change, please amend them so that we can get in touch with you if needed:

- Select 'Edit company details' from the 'company menu' (figure 2.18).
- This takes you to the 'Edit company details' page (figure 2.19) where you can change and update information.
- Click 'save' when you have finished.

Figure 2.18: Edit company details page

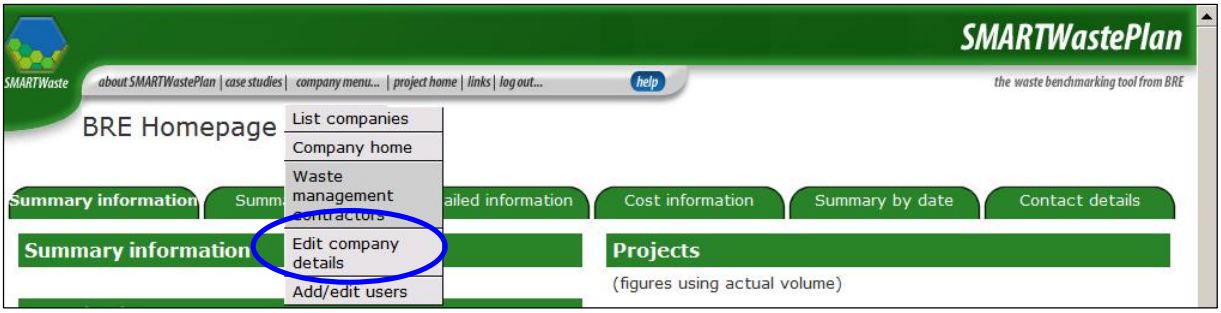
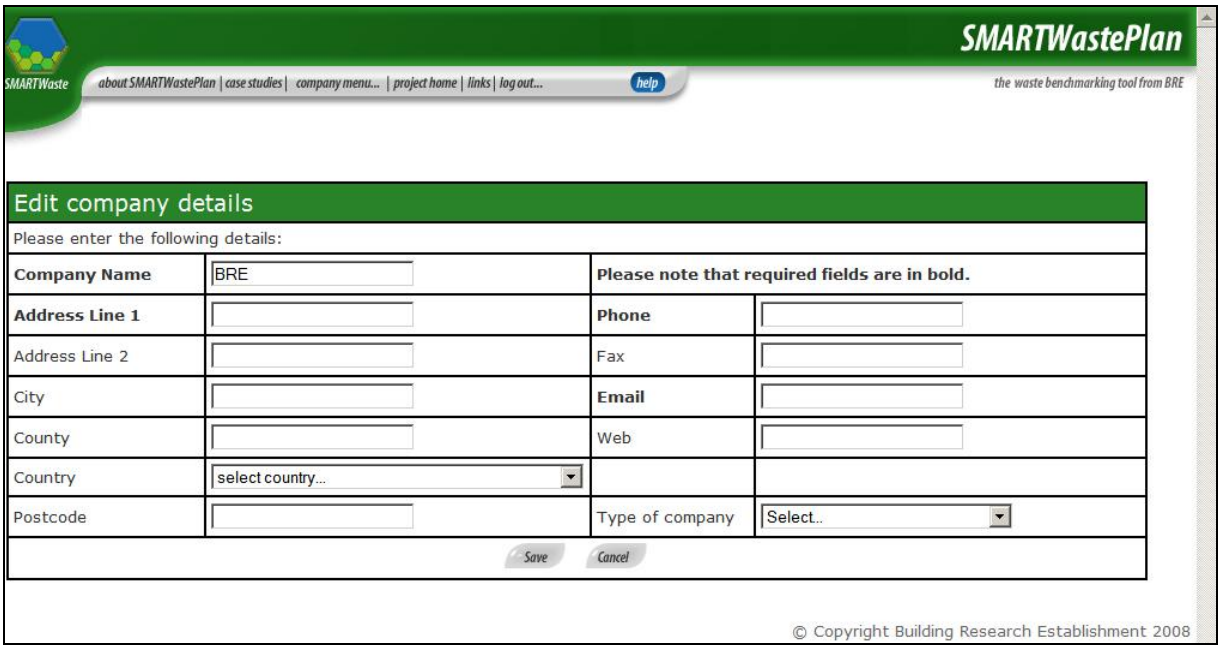


Figure 2.19: Edit company details page



3. Company Homepage

The company homepage provides you with an overview of information for your whole company through a number of tabs.

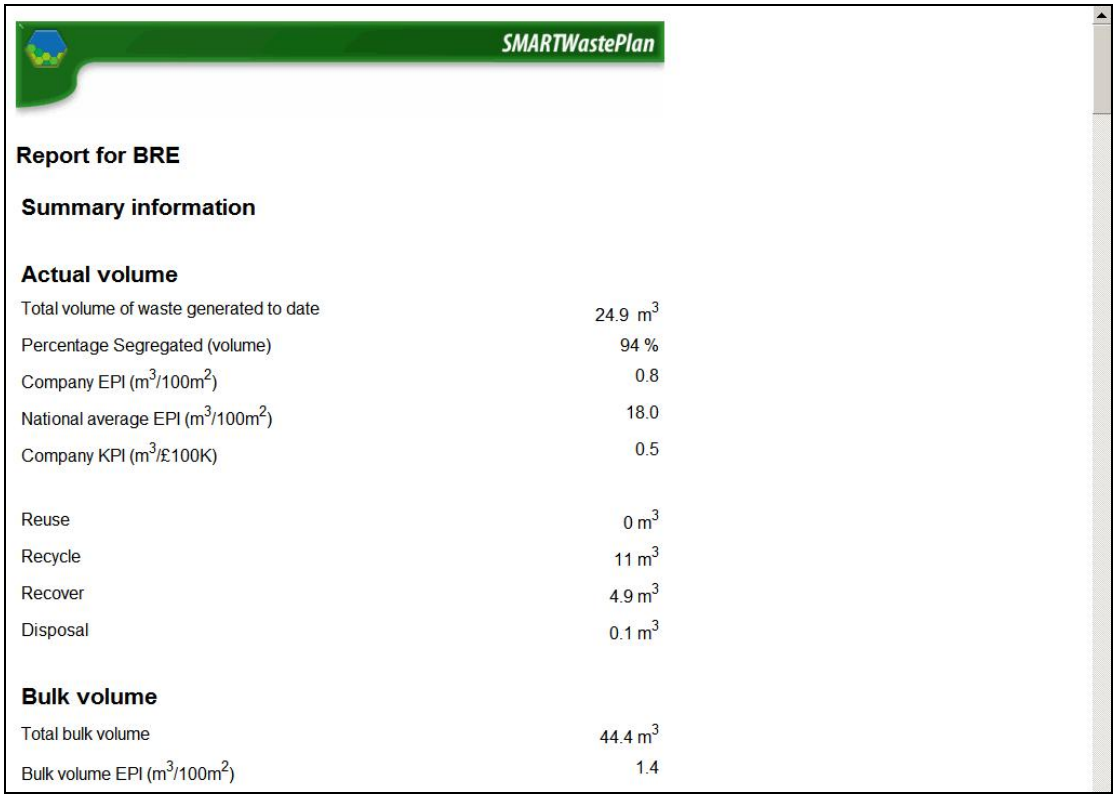
Whenever you login to SMARTWaste Plan, you are automatically taken to the company homepage 'Summary Information' tab (see section 2.3) which lists the projects you have registered on the tool.

The company homepage provides a summary at a company level of any waste data entered via projects. If you wish to see SWMP details you will need to click on the relevant project name to see this, as SWMPs are project specific.

Click on the green tabs to navigate around your company information (details below on each tab). The title of the tab you are using appears in bold font.

You can obtain a useful report of your company-wide information by clicking on the 'printer friendly' button under the list of projects on the 'Summary Information' page. This amalgamates all the information from all the tabs into one page (figures 3.1a and 3.1b). This can then be printed in the usual way, by going to 'File' on the toolbar and selecting 'Print'. It can also be saved as an html file [save as type: Webpage, complete (*.htm, *.html)], opened in Microsoft Word and be edited so that you can tailor your report with text as necessary.

Figure 3.1a: Summary Report for the Company


SMARTWastePlan

Report for BRE

Summary information

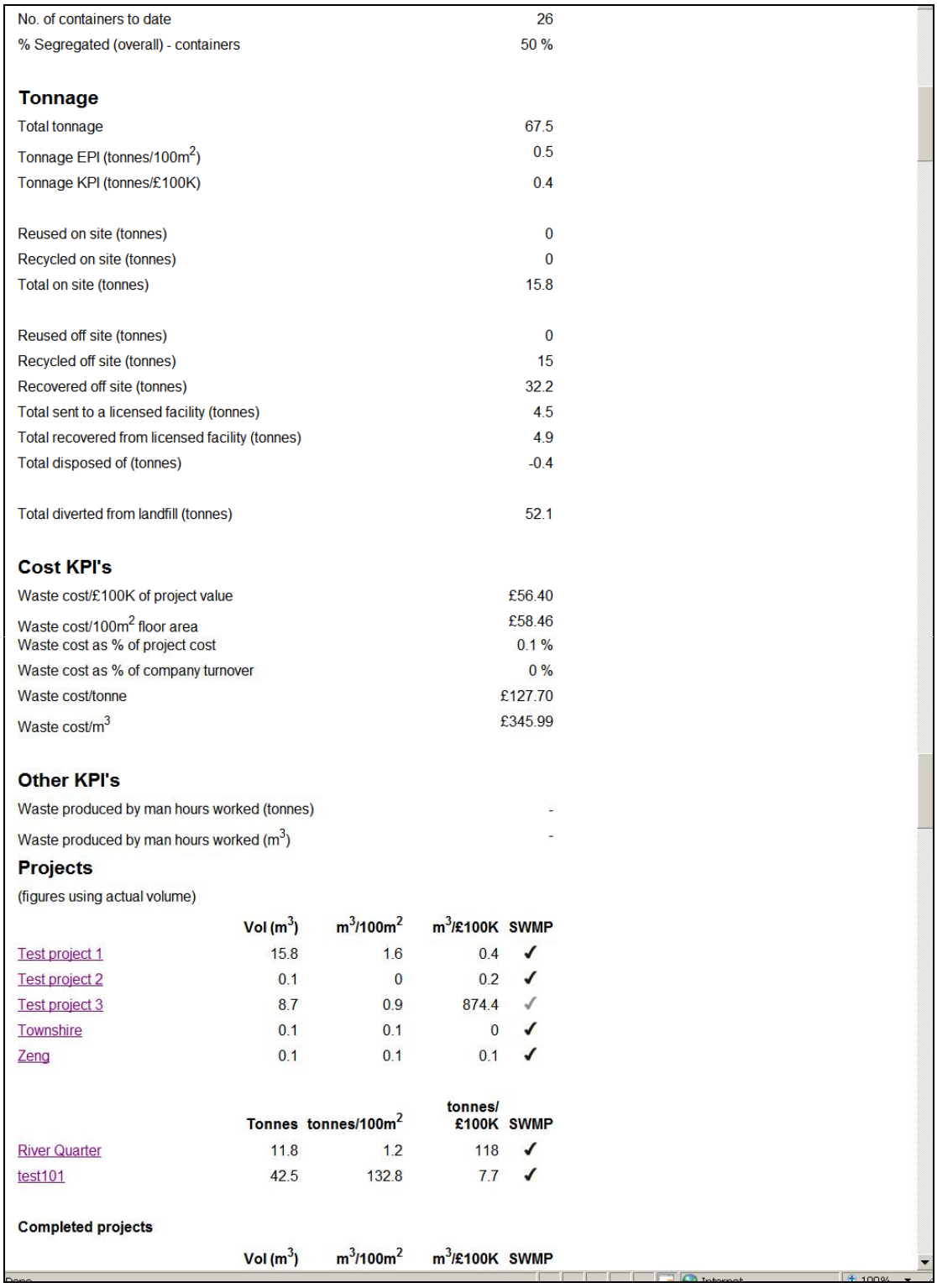
Actual volume

Total volume of waste generated to date	24.9 m^3
Percentage Segregated (volume)	94 %
Company EPI (m^3/100m^2)	0.8
National average EPI (m^3/100m^2)	18.0
Company KPI (m^3/£100K)	0.5
Reuse	0 m^3
Recycle	11 m^3
Recover	4.9 m^3
Disposal	0.1 m^3

Bulk volume

Total bulk volume	44.4 m^3
Bulk volume EPI (m^3/100m^2)	1.4

Figure 3.1b: Summary Report for the Company (continued)



No. of containers to date	26
% Segregated (overall) - containers	50 %

Tonnage

Total tonnage	67.5
Tonnage EPI (tonnes/100m^2)	0.5
Tonnage KPI (tonnes/£100K)	0.4
Reused on site (tonnes)	0
Recycled on site (tonnes)	0
Total on site (tonnes)	15.8
Reused off site (tonnes)	0
Recycled off site (tonnes)	15
Recovered off site (tonnes)	32.2
Total sent to a licensed facility (tonnes)	4.5
Total recovered from licensed facility (tonnes)	4.9
Total disposed of (tonnes)	-0.4
Total diverted from landfill (tonnes)	52.1

Cost KPI's

Waste cost/£100K of project value	£56.40
Waste cost/100m^2 floor area	£58.46
Waste cost as % of project cost	0.1 %
Waste cost as % of company turnover	0 %
Waste cost/tonne	£127.70
Waste cost/m^3	£345.99

Other KPI's

Waste produced by man hours worked (tonnes)	-
Waste produced by man hours worked (m^3)	-

Projects

(figures using actual volume)

	Vol (m^3)	m^3/100m^2	m^3/£100K	SWMP
Test project 1	15.8	1.6	0.4	✓
Test project 2	0.1	0	0.2	✓
Test project 3	8.7	0.9	874.4	✓
Townshire	0.1	0.1	0	✓
Zeng	0.1	0.1	0.1	✓

	Tonnes	tonnes/100m^2	tonnes/ £100K	SWMP
River Quarter	11.8	1.2	118	✓
test101	42.5	132.8	7.7	✓

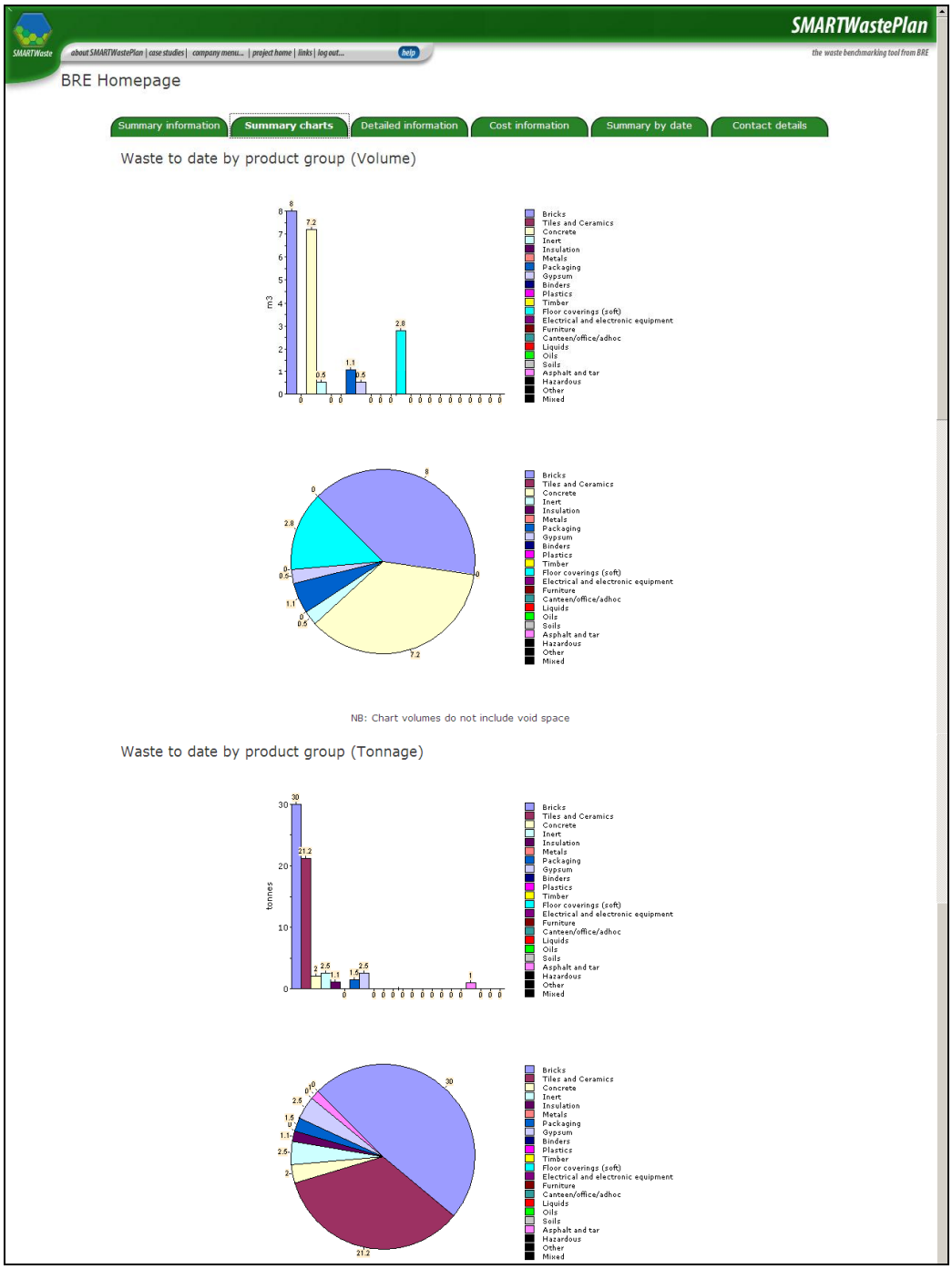
Completed projects

	Vol (m^3)	m^3/100m^2	m^3/£100K	SWMP

3.1. Company Homepage 'Summary Chart'

The 'Waste to date by product group' graphs found on the 'Summary Chart' tab (figure 3.2) show the total waste generated to date on all projects by waste product group. There is one graph for volume based projects and one for tonnage based projects. These graphs automatically update as new information is submitted into the system.

Figure 3.2: Company Homepage 'Summary Chart' tab



3.2. Company Homepage 'Detailed Information'

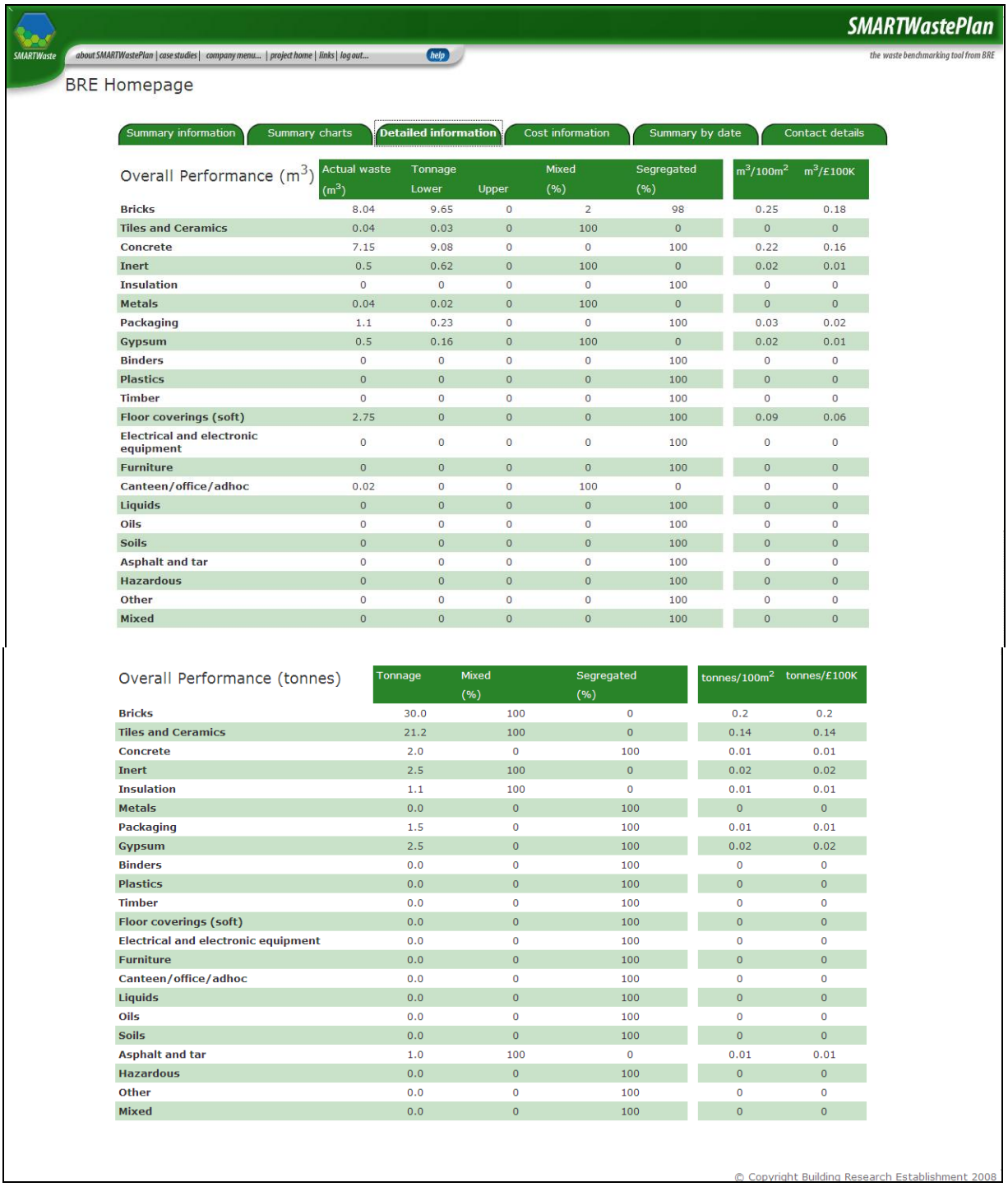
The 'Detailed information' tab shows the overall performance for all your projects split into those collecting waste data as volume and those collecting it as tonnes (figure 3.3). Table 3.1 summarises the waste data displayed.

Table 3.1: Information displayed on company's Detailed information' tab

Waste data displayed	**Volume based projects**	**Tonnage based projects**
Total actual waste	√ Volume of waste in m^3	√ Weight of waste in tonnes
Estimated tonnage *(based on a conversion factor which translates the volume into approximate tonnes[2])*	√	x
The percentage of all waste that is mixed waste	√	√
The percentage of all waste that is segregated waste	√	√
Performance indicators for each of the 22 product groups	√ m^3 waste / $100m^2$ of floor area and m^3 of waste / £100,000 project cost	√ tonnes of waste / $100m^2$ of floor area and tonnes of waste / £100,000 project cost

[2] The conversion factors used on SMARTWaste Plan have been taken from the Environment Agency Wales report on the key findings of their Construction and Demolition waste survey which can be downloaded from http://www.environment-agency.gov.uk/research/library/publications/33979.aspx. The conversion factors can be seen in Appendix 5 of the full report.

Figure 3.3: Company Homepage 'Detailed Information' tab



Overall Performance (m^3)

	Actual waste (m^3)	Tonnage Lower	Tonnage Upper	Mixed (%)	Segregated (%)	m^3/100m^2	m^3/£100K
Bricks	8.04	9.65	0	2	98	0.25	0.18
Tiles and Ceramics	0.04	0.03	0	100	0	0	0
Concrete	7.15	9.08	0	0	100	0.22	0.16
Inert	0.5	0.62	0	100	0	0.02	0.01
Insulation	0	0	0	0	100	0	0
Metals	0.04	0.02	0	100	0	0	0
Packaging	1.1	0.23	0	0	100	0.03	0.02
Gypsum	0.5	0.16	0	100	0	0.02	0.01
Binders	0	0	0	0	100	0	0
Plastics	0	0	0	0	100	0	0
Timber	0	0	0	0	100	0	0
Floor coverings (soft)	2.75	0	0	0	100	0.09	0.06
Electrical and electronic equipment	0	0	0	0	100	0	0
Furniture	0	0	0	0	100	0	0
Canteen/office/adhoc	0.02	0	0	100	0	0	0
Liquids	0	0	0	0	100	0	0
Oils	0	0	0	0	100	0	0
Soils	0	0	0	0	100	0	0
Asphalt and tar	0	0	0	0	100	0	0
Hazardous	0	0	0	0	100	0	0
Other	0	0	0	0	100	0	0
Mixed	0	0	0	0	100	0	0

Overall Performance (tonnes)

	Tonnage	Mixed (%)	Segregated (%)	tonnes/100m^2	tonnes/£100K
Bricks	30.0	100	0	0.2	0.2
Tiles and Ceramics	21.2	100	0	0.14	0.14
Concrete	2.0	0	100	0.01	0.01
Inert	2.5	100	0	0.02	0.02
Insulation	1.1	100	0	0.01	0.01
Metals	0.0	0	100	0	0
Packaging	1.5	0	100	0.01	0.01
Gypsum	2.5	0	100	0.02	0.02
Binders	0.0	0	100	0	0
Plastics	0.0	0	100	0	0
Timber	0.0	0	100	0	0
Floor coverings (soft)	0.0	0	100	0	0
Electrical and electronic equipment	0.0	0	100	0	0
Furniture	0.0	0	100	0	0
Canteen/office/adhoc	0.0	0	100	0	0
Liquids	0.0	0	100	0	0
Oils	0.0	0	100	0	0
Soils	0.0	0	100	0	0
Asphalt and tar	1.0	100	0	0.01	0.01
Hazardous	0.0	0	100	0	0
Other	0.0	0	100	0	0
Mixed	0.0	0	100	0	0

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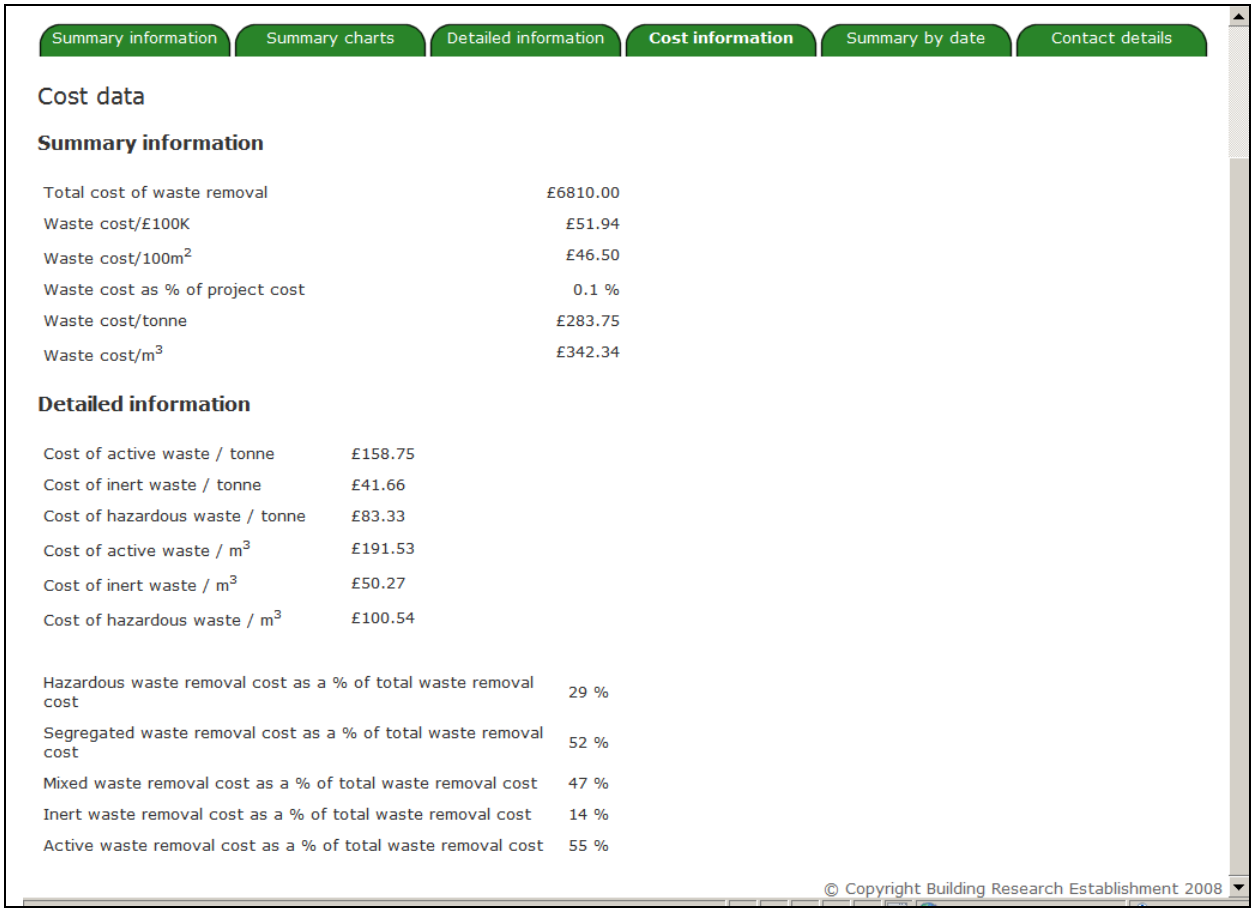
3.3. Company Homepage 'Cost Information'

The 'Cost information' tab (figure 3.4) shows a summary of the waste cost data for all your projects. This includes the total cost of waste removal, waste cost by project value, floor area, waste weight, waste volume and by waste product type.

Figure 3.4: Company Homepage 'Cost Information' tab


Summary information
Summary charts
Detailed information
Cost information
Summary by date
Contact details
Cost data
Summary information
Total cost of waste removal £6810.00
Waste cost/£100K £51.94
Waste cost/100m2 £46.50
Waste cost as % of project cost 0.1 %
Waste cost/tonne £283.75
Waste cost/m3 £342.34
Detailed information
Cost of active waste / tonne £158.75
Cost of inert waste / tonne £41.66
Cost of hazardous waste / tonne £83.33
Cost of active waste / m3 £191.53
Cost of inert waste / m3 £50.27
Cost of hazardous waste / m3 £100.54
Hazardous waste removal cost as a % of total waste removal cost 29 %
Segregated waste removal cost as a % of total waste removal cost 52 %
Mixed waste removal cost as a % of total waste removal cost 47 %
Inert waste removal cost as a % of total waste removal cost 14 %
Active waste removal cost as a % of total waste removal cost 55 %
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3.4. Company Homepage 'Summary by Date'

The 'Summary by Date' tab (figure 3.5a and 3.5b) shows filtered information by date. Just enter a Start Date and End Date for the period you are looking for (e.g. this could be a month, quarter or year), then click 'Update'. The tool will then create a summary report of the waste data for the criteria you specified.

Figure 3.5a: Company Homepage 'Summary by Date/Project Type' tab

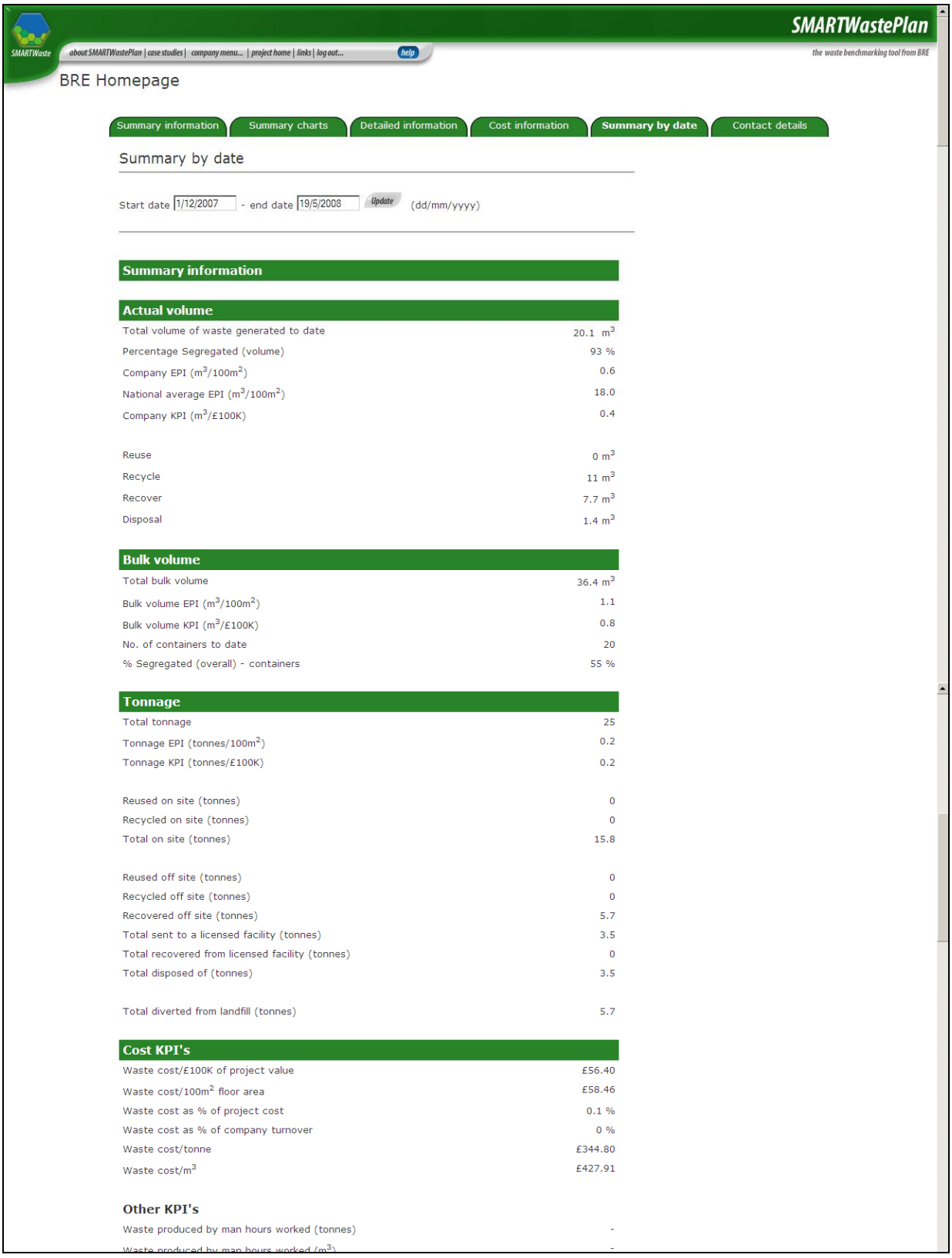

SMARTWastePlan
about SMARTWastePlan | case studies | company menu... | project home | links | log out...
help
the waste benchmarking tool from BRE
BRE Homepage
Summary information
Summary charts
Detailed information
Cost information
Summary by date
Contact details
Summary by date
Start date 1/12/2007 - end date 19/5/2008 Update (dd/mm/yyyy)
Summary information
Actual volume
Total volume of waste generated to date 20.1 m3
Percentage Segregated (volume) 93 %
Company EPI (m3/100m2) 0.6
National average EPI (m3/100m2) 18.0
Company KPI (m3/£100K) 0.4
Reuse 0 m3
Recycle 11 m3
Recover 7.7 m3
Disposal 1.4 m3
Bulk volume
Total bulk volume 36.4 m3
Bulk volume EPI (m3/100m2) 1.1
Bulk volume KPI (m3/£100K) 0.8
No. of containers to date 20
% Segregated (overall) - containers 55 %
Tonnage
Total tonnage 25
Tonnage EPI (tonnes/100m2) 0.2
Tonnage KPI (tonnes/£100K) 0.2
Reused on site (tonnes) 0
Recycled on site (tonnes) 0
Total on site (tonnes) 15.8
Reused off site (tonnes) 0
Recycled off site (tonnes) 0
Recovered off site (tonnes) 5.7
Total sent to a licensed facility (tonnes) 3.5
Total recovered from licensed facility (tonnes) 0
Total disposed of (tonnes) 3.5
Total diverted from landfill (tonnes) 5.7
Cost KPI's
Waste cost/£100K of project value £56.40
Waste cost/100m2 floor area £58.46
Waste cost as % of project cost 0.1 %
Waste cost as % of company turnover 0 %
Waste cost/tonne £344.80
Waste cost/m3 £427.91
Other KPI's
Waste produced by man hours worked (tonnes) -

Figure 3.5b: Company Homepage 'Summary by Date/Project Type' tab (continued)

Projects

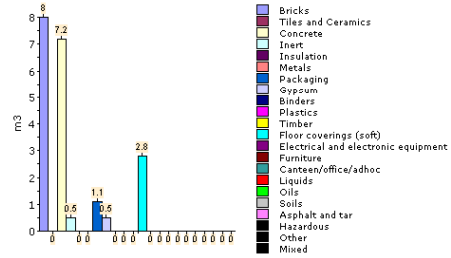
(figures using actual volume)

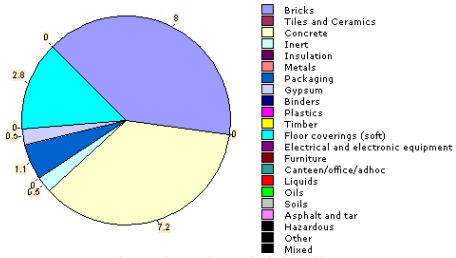
	Vol (m^3)	$m^3/100m^2$	$m^3/£100K$	SWMP
	Tonnes	$tonnes/100m^2$	$tonnes/£100K$	SWMP

Completed projects

	Vol (m^3)	$m^3/100m^2$	$m^3/£100K$	SWMP
	Tonnes	$tonnes/100m^2$	$tonnes/£100K$	SWMP

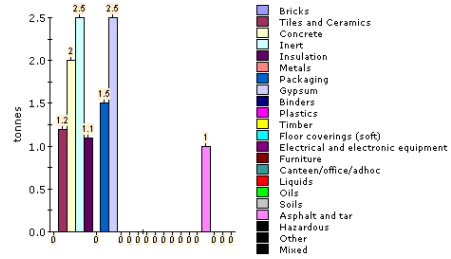
Waste to date by product group (Volume)

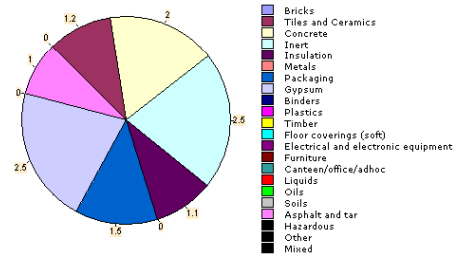




NB: Chart volumes do not include void space

Waste to date by product group (Tonnage)





Detailed information

Overall Performance (m^3)	Actual waste (m^3)	Tonnage Lower	Tonnage Upper	Mixed (%)	Segregated (%)	$m^3/100m^2$	$m^3/£100K$
Bricks	8.04	9.65	0	2	98	0.05	0.05
Tiles and Ceramics	0.04	0.03	0	100	0	0	0
Concrete	7.15	9.08	0	0	100	0.05	0.05
Inert	0.5	0.62	0	100	0	0	0
Insulation	0	0	0	0	100	0	0
Metals	0.04	0.02	0	100	0	0	0
Packaging	1.1	0.22	0	0	100	0.01	0.01

3.5. Company Homepage 'Contact Details'

The 'Contact Details' tab (figure 3.6) shows your company contact details (click 'Edit' to update) and lists the users set up on the company account.

When a user's name is underlined, this means that you have user access rights to view and edit any of the details for that user by clicking on their name (see section 2.5). Where the user name is not underlined, this means that you are unable to have access to the user's details.

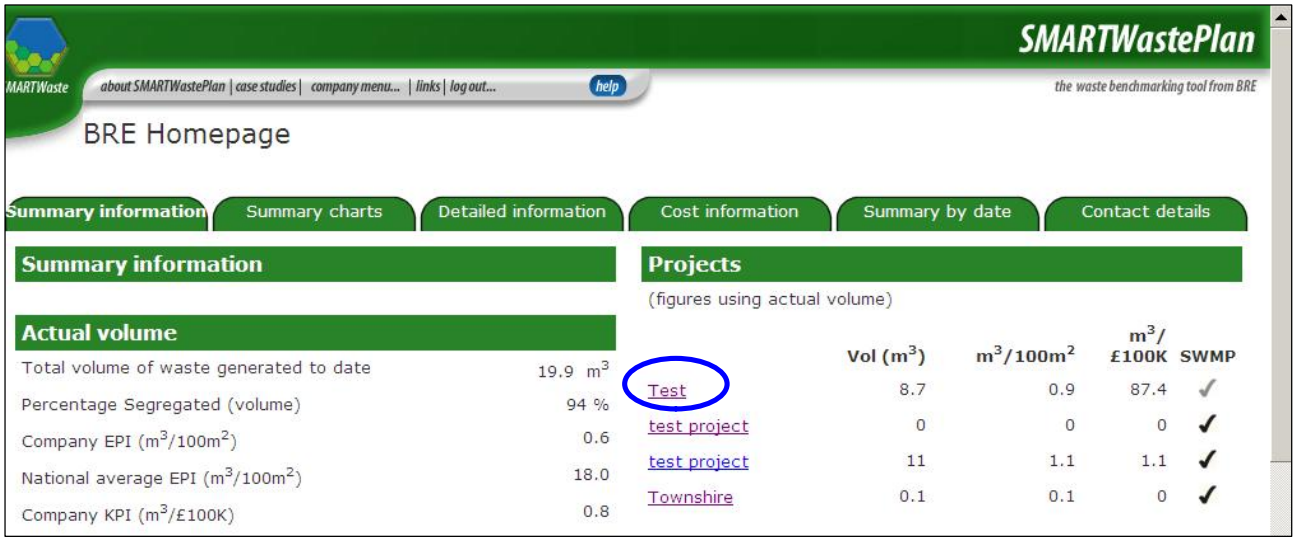
If you have the appropriate admin access rights then you will also be able to add new users by using the 'Add' button (see section 2.5).

Figure 3.6: Company Homepage 'Contact Details' tab

4. Projects

The company homepage lists all the projects your company has registered on SMARTWaste Plan. When a project name is underlined, you as a user can access the project by clicking on the name (see figure 4.1). If you cannot access a project which you need to get into, please contact your company admin or project admin user to be granted access.

Figure 4.1: Access to project name



4.1. Project Homepage 'Summary Information'

Clicking on a project listed on the company homepage takes you to that project's homepage. The name of the project you are viewing information for is shown above the tabs at all times.

The information shown is slightly different depending on whether you are collecting waste data in volume (figure 4.2a) or collecting waste data in tonnes (figure 4.2b). This data format was chosen when the project was set up, once waste data has been added you cannot change the data format i.e. cannot change from tonnes to volume or vice versa.

The project 'Summary Information' page summarises the project details, SWMP progress, cost KPIs and waste data. On this project page, you can add or update the following (providing you have the correct access rights):

- projects details
- project users (see section 4.2 for further details)
- waste management contractors (see section 4.3)
- subcontractors (see section 4.4)
- cost data (see section 4.5)

You can **access your SWMP** for this project by clicking on the tab 'SWMP' (figure 4.3), which will take you to the SWMP home page (see section 5 for further details).

You can also **view waste measurement data** you have entered and add further data (see section 6 for further details).

In addition, you can **link your project to a specific client** if that client has their own special Client Level SMARTWaste Plan account. To do this, click the 'update' button in the client link section (figure 4.2a) and enter the password which your client has given to you. This will give that client read only access to that project in their Client Level account, so they will not need to log in to your account to

view the project's information. The client will not be able to change or add information to these linked projects. Also, any data or projects you have stored on your SMARTWaste plan account for other clients will remain confidential; the client will not be able to view projects which you do not link to their account. For further details about the Client Level SMARTWaste Plan, see appendix 2 and 3.

Figure 4.2a: Project 'Summary Information' tab (collecting waste data in volume)

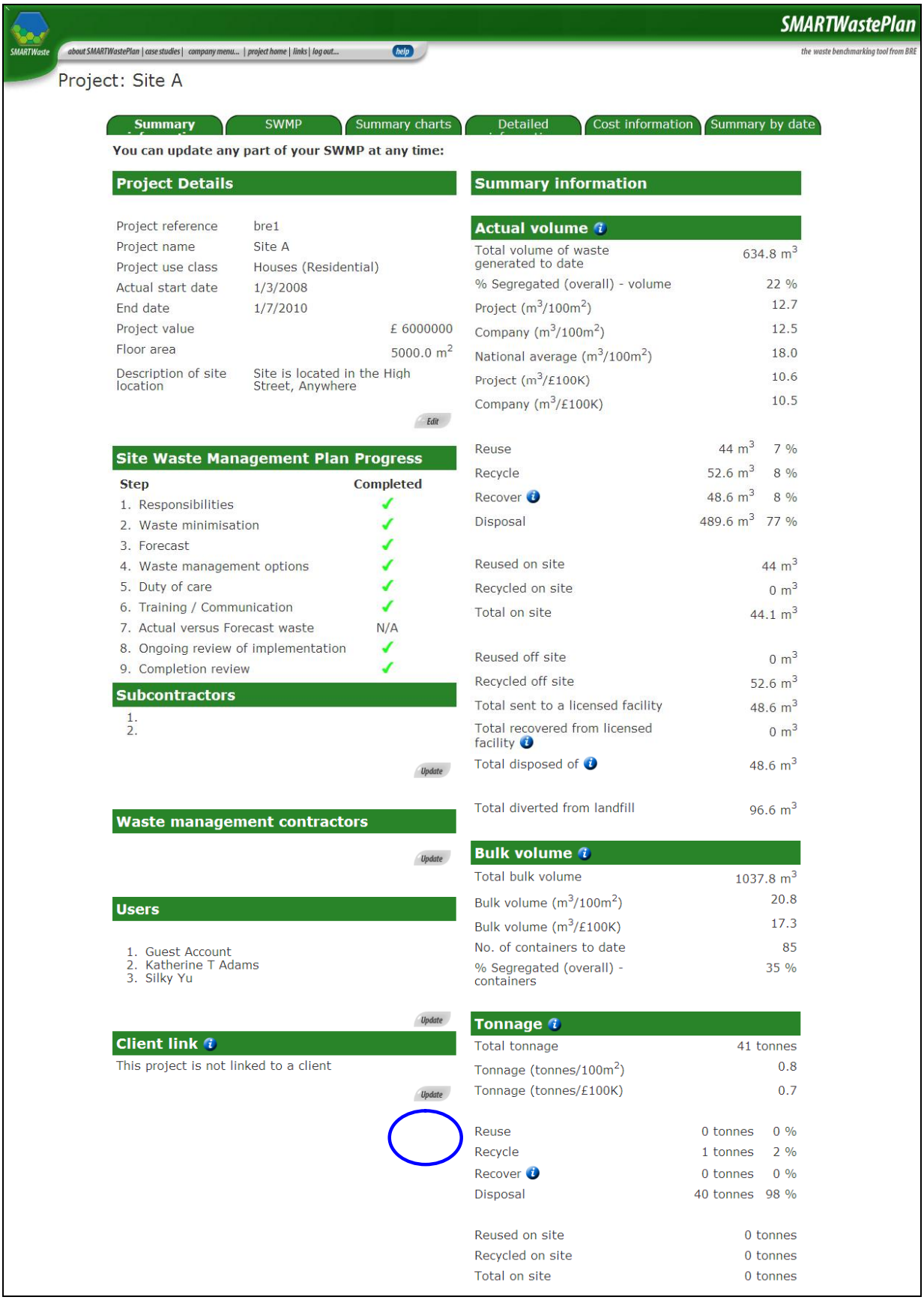

SMARTWastePlan
the waste benchmarking tool from BRE
about SMARTWastePlan | case studies | company menu... | project home | links | log out... help
Project: Site A
Summary
SWMP
Summary charts
Detailed
Cost information
Summary by date
You can update any part of your SWMP at any time:
Project Details
Project reference bre1
Project name Site A
Project use class Houses (Residential)
Actual start date 1/3/2008
End date 1/7/2010
Project value £ 6000000
Floor area 5000.0 m2
Description of site location Site is located in the High Street, Anywhere
Edit
Site Waste Management Plan Progress
Step Completed
1. Responsibilities ✓
2. Waste minimisation ✓
3. Forecast ✓
4. Waste management options ✓
5. Duty of care ✓
6. Training / Communication ✓
7. Actual versus Forecast waste N/A
8. Ongoing review of implementation ✓
9. Completion review ✓
Subcontractors
1.
2.
Update
Waste management contractors
Update
Users
1. Guest Account
2. Katherine T Adams
3. Silky Yu
Update
Client link
This project is not linked to a client
Update
Summary information
Actual volume
Total volume of waste generated to date 634.8 m3
% Segregated (overall) - volume 22 %
Project (m3/100m2) 12.7
Company (m3/100m2) 12.5
National average (m3/100m2) 18.0
Project (m3/£100K) 10.6
Company (m3/£100K) 10.5
Reuse 44 m3 7 %
Recycle 52.6 m3 8 %
Recover 48.6 m3 8 %
Disposal 489.6 m3 77 %
Reused on site 44 m3
Recycled on site 0 m3
Total on site 44.1 m3
Reused off site 0 m3
Recycled off site 52.6 m3
Total sent to a licensed facility 48.6 m3
Total recovered from licensed facility 0 m3
Total disposed of 48.6 m3
Total diverted from landfill 96.6 m3
Bulk volume
Total bulk volume 1037.8 m3
Bulk volume (m3/100m2) 20.8
Bulk volume (m3/£100K) 17.3
No. of containers to date 85
% Segregated (overall) - containers 35 %
Tonnage
Total tonnage 41 tonnes
Tonnage (tonnes/100m2) 0.8
Tonnage (tonnes/£100K) 0.7
Reuse 0 tonnes 0 %
Recycle 1 tonnes 2 %
Recover 0 tonnes 0 %
Disposal 40 tonnes 98 %
Reused on site 0 tonnes
Recycled on site 0 tonnes
Total on site 0 tonnes

Figure 4.2b: Project 'Summary Information' tab (collecting waste data in tonnes)

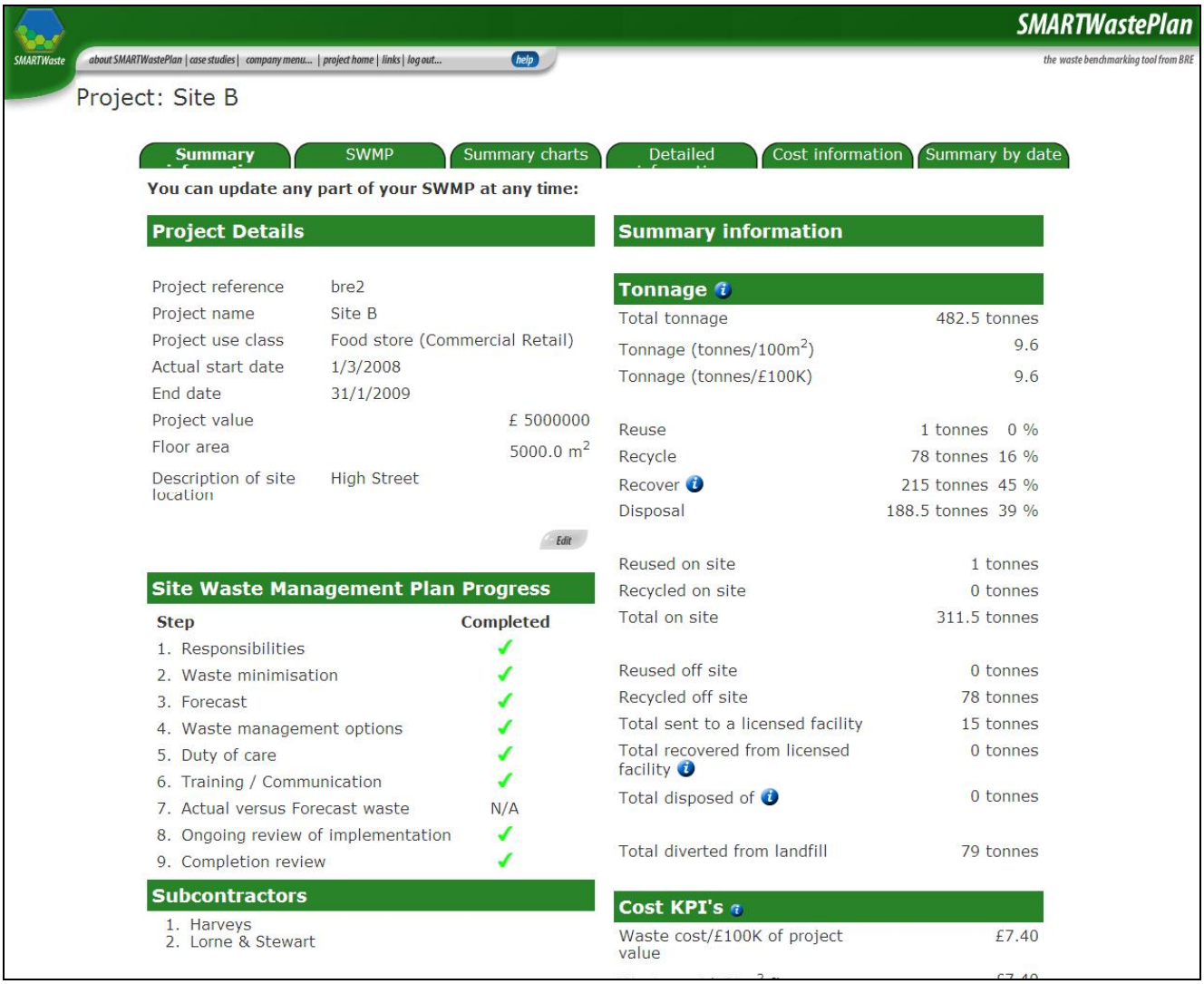

SMARTWastePlan
the waste benchmarking tool from BRE
about SMARTWastePlan | case studies | company menu... | project home | links | log out...
help
Project: Site B
Summary
SWMP
Summary charts
Detailed
Cost information
Summary by date
You can update any part of your SWMP at any time:
Project Details
Project reference bre2
Project name Site B
Project use class Food store (Commercial Retail)
Actual start date 1/3/2008
End date 31/1/2009
Project value £ 5000000
Floor area 5000.0 m2
Description of site location High Street
Edit
Site Waste Management Plan Progress
Step Completed
1. Responsibilities ✓
2. Waste minimisation ✓
3. Forecast ✓
4. Waste management options ✓
5. Duty of care ✓
6. Training / Communication ✓
7. Actual versus Forecast waste N/A
8. Ongoing review of implementation ✓
9. Completion review ✓
Subcontractors
1. Harveys
2. Lorne & Stewart
Summary information
Tonnage
Total tonnage 482.5 tonnes
Tonnage (tonnes/100m2) 9.6
Tonnage (tonnes/£100K) 9.6
Reuse 1 tonnes 0 %
Recycle 78 tonnes 16 %
Recover 215 tonnes 45 %
Disposal 188.5 tonnes 39 %
Reused on site 1 tonnes
Recycled on site 0 tonnes
Total on site 311.5 tonnes
Reused off site 0 tonnes
Recycled off site 78 tonnes
Total sent to a licensed facility 15 tonnes
Total recovered from licensed facility 0 tonnes
Total disposed of 0 tonnes
Total diverted from landfill 79 tonnes
Cost KPI's
Waste cost/£100K of project value £7.40

Figure 4.3: Access to SWMP

SMARTWastePlan
the waste benchmarking tool from BRE
about SMARTWastePlan | case studies | company menu... | project home | links | log out...
help
Project: Test
Summary information
SWMP
Summary charts
Detailed information
Cost information
Summary by date
You can update any part of your SWMP at any time:

4.2. Project 'Granting users access to projects'

For a user to be able to access a project, the company or project admin user must grant them access to the relevant project:

- Go to the relevant project homepage
- Click the 'Update' button (figure 4.4) in the users section of the project 'Summary Information' tab
- This takes you to the 'Project Users' update page which lists all the users for your company (figure 4.5)
- Tick the box next to the user name to give them access to the project
- Click the 'Update' button

Figure 4.4: Project - 'Users' update button

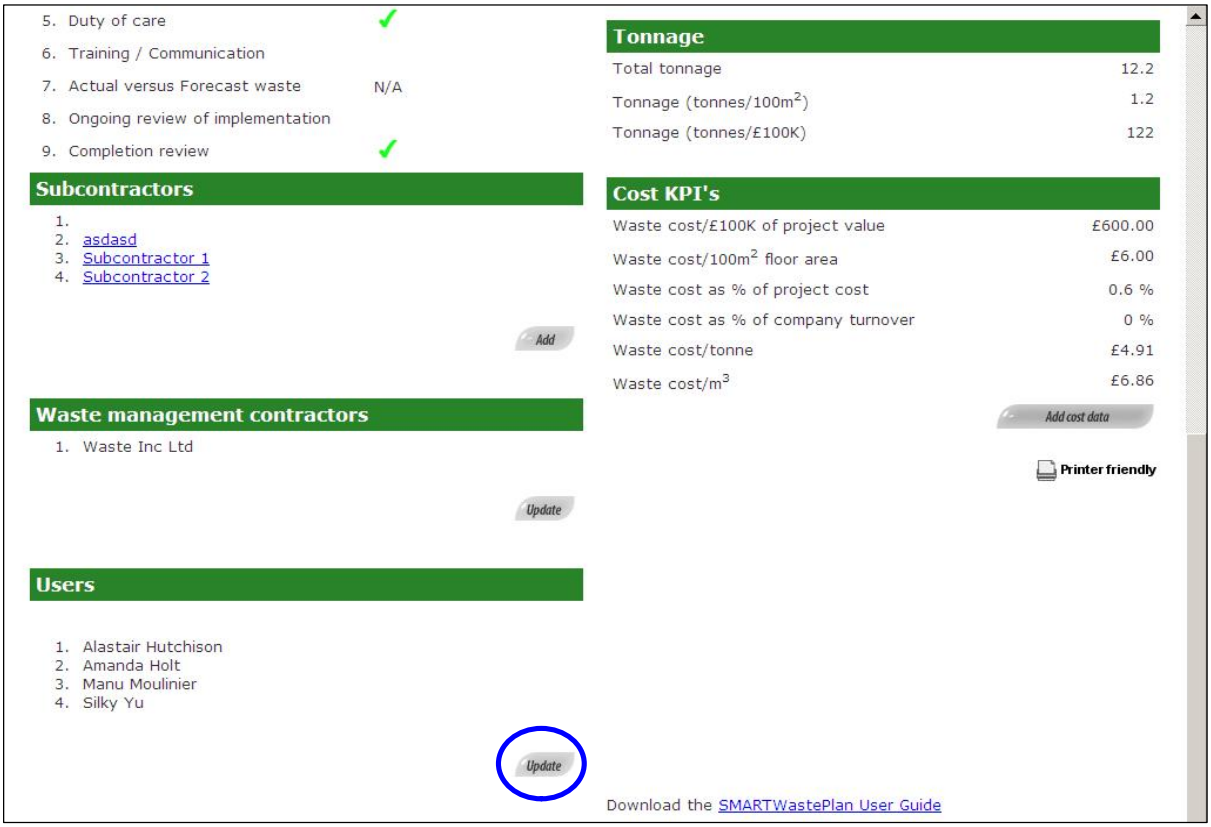


Figure 4.5: Project Users update page

4.3. Project 'Assigning waste management contractors to projects'

A waste management contractor must be added at the company level before it can be assigned to a project (see section 2.6 for how to add them at the company level).

The company admin user, project admin user or project user can add or change the waste management contractors associated with a project:

- Go to the relevant project's homepage
- Click the 'Update' button in the Waste management contractors section (figure 4.6) of the project 'Summary Information' tab
- This takes you to the 'Waste management contractor' page (figure 4.7) which lists all the waste management contractors you have added for your company, the waste carrier is listed first and then underneath the waste site/facilities for this carrier are listed (shown as a bullet point)
- Tick the box next to the carrier name and its relevant waste site/facility name to assign them to the project – it is important to select **both** the carrier and the associated waste site/facility
- Click the 'Save' button

Figure 4.6: Project - 'Waste management contractors' update button

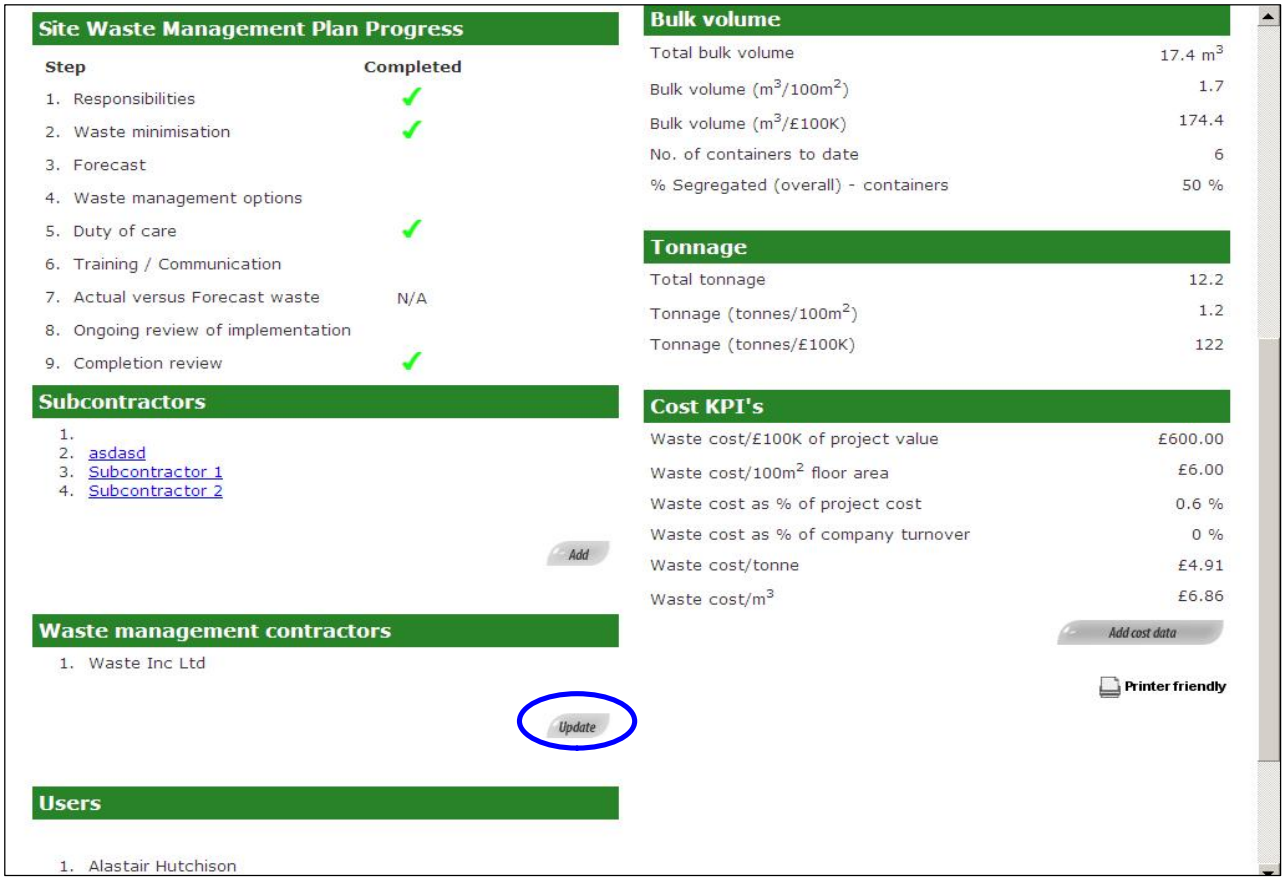
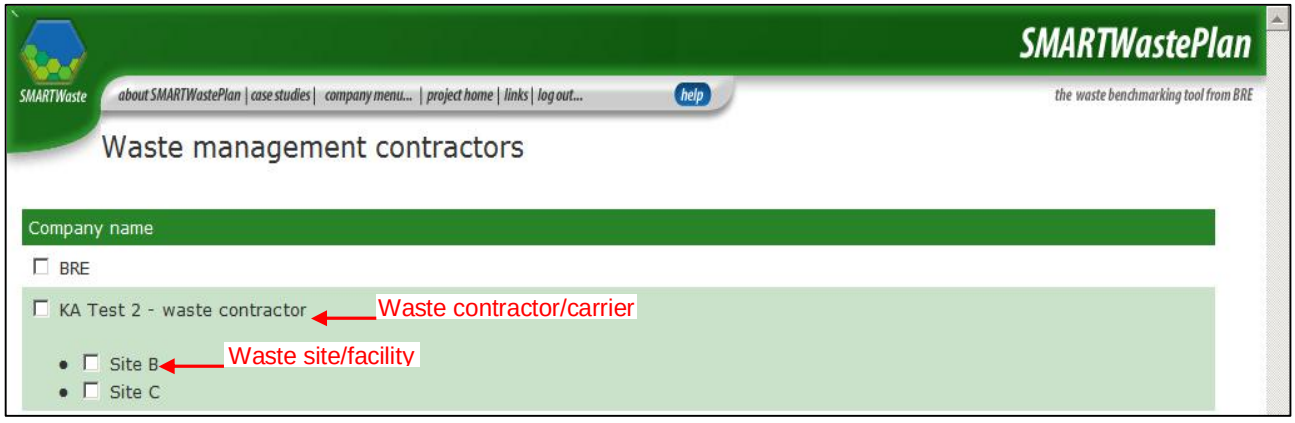


Figure 4.7: Waste management contractors update page



4.4. Project 'Assigning subcontractors to projects'

This process is similar to assigning waste management contractors. Subcontractors must be added at the company level first (see section 2.7 for how to add them at the company level).

The company admin user, project admin user or project user can add or change the subcontractors associated with a project:

- Go to the relevant project's homepage
- Click the 'Update' button in the Subcontractors section (figure 4.8) of the project 'Summary Information' tab
- This takes you to the 'Subcontractor' page (figure 4.9) which lists all the subcontractors you have added for your company
- Tick the box next to the subcontractor name to assign them to the project
- Click the 'Save' button

Figure 4.8: Project - 'Subcontractors' update button

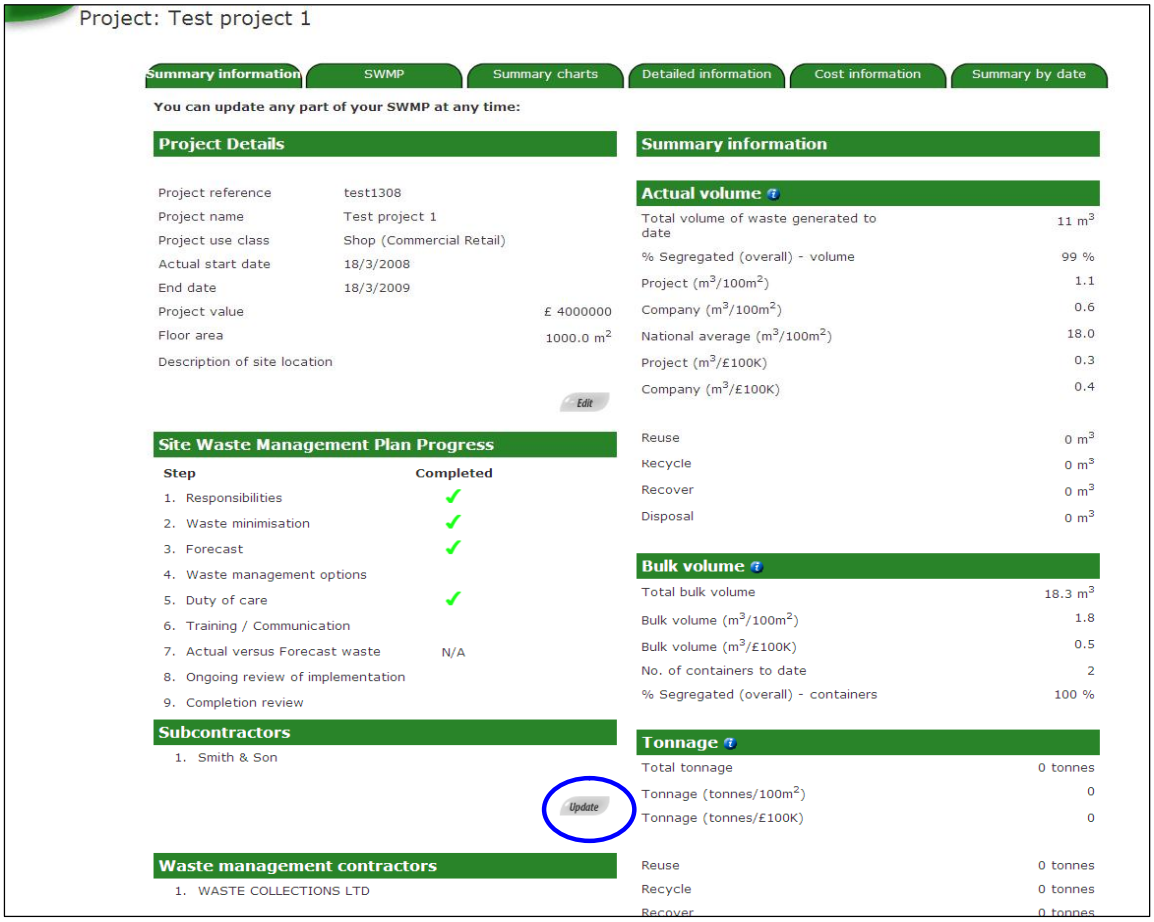
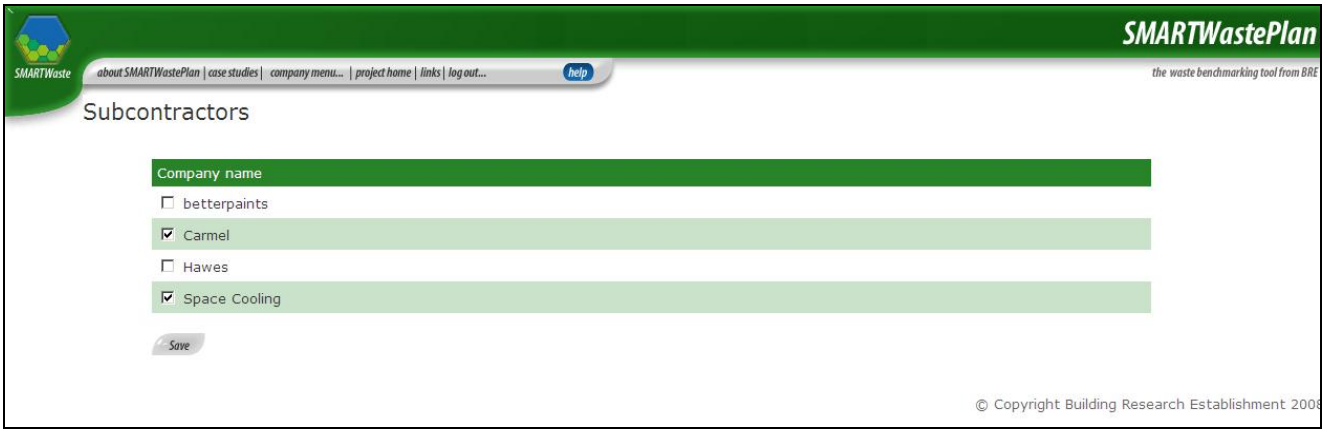


Figure 4.9: Subcontractor page



4.5. Project 'Adding waste cost data'

To keep a record of how much is being spent on removing waste from site, use the 'Add cost data' function from the project homepage (figure 4.10):

- Click 'add cost data' button on the bottom right hand side of the project homepage
- This will take you to a form (figure 4.11) where you can record container costs either per skip/container, or overall for the project.

Cost data is stored cumulative, so if you add more than one set of data, the tool will automatically sum this up for you.

Figure 4.10 Project 'Add cost data' button

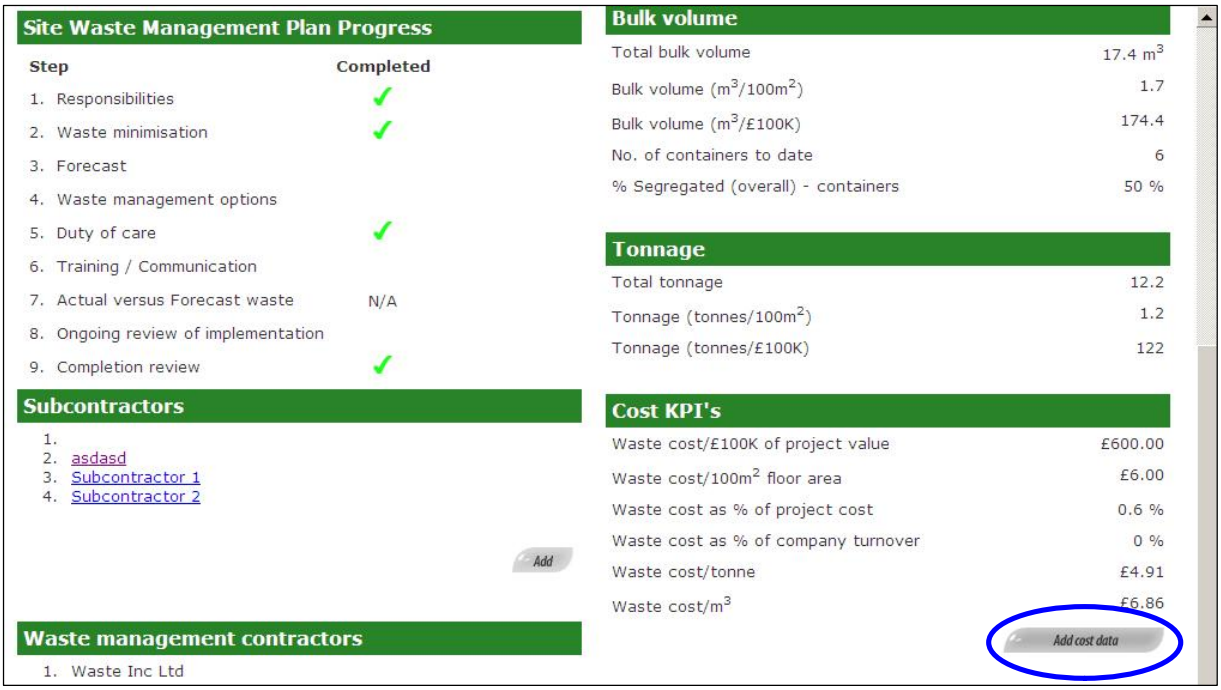
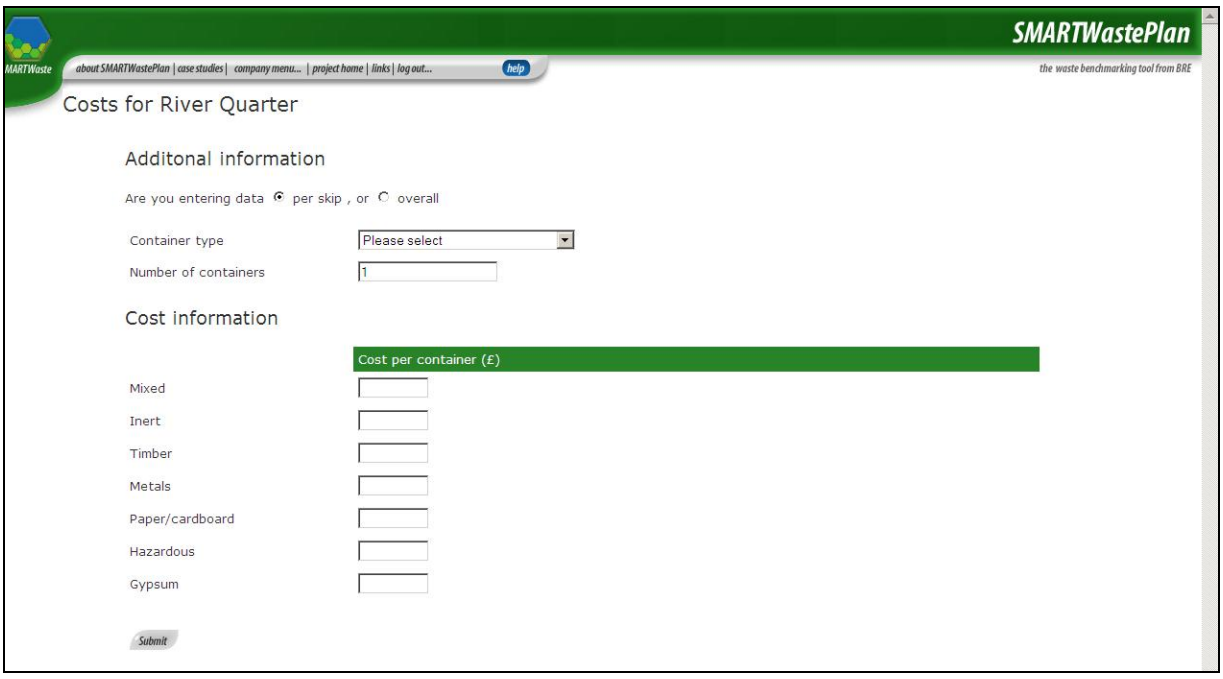


Figure 4.11: Cost information page



4.6. Project 'Viewing waste cost log'

To view all waste cost data that has been entered for the project:

- From the project homepage, click on the 'Cost information' tab
- Click the 'View cost log' link at the bottom right hand side of the cost information page (figure 4.12).
- This will open the project's 'cost log' which displays each entry of cost data that has previously been added for this project.
- This gives you the opportunity to review the cost data and also amend it if necessary. However, please note that to amend an entry, you must be logged in as a company admin user.
- To amend a cost data entry, click on the hyperlinked 'entry type' to open the original form and make the necessary amendments (figure 4.13). When finished, click the 'submit' button.

Figure 4.12: Cost information – 'view cost log' button

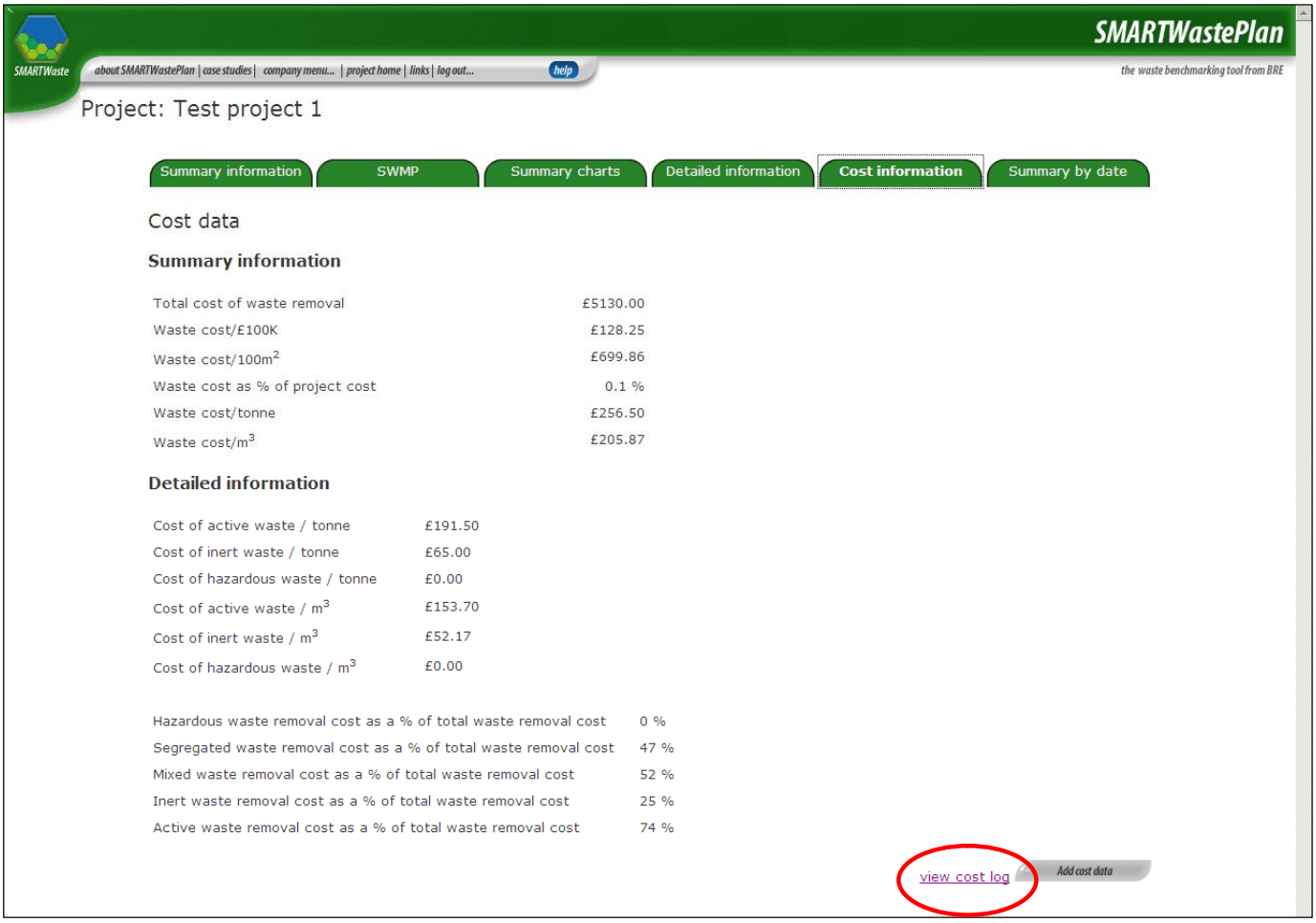
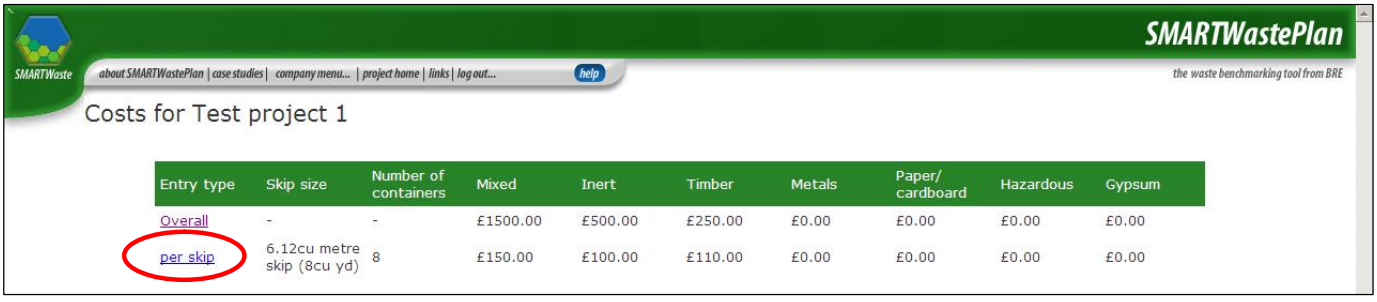

SMARTWastePlan
the waste benchmarking tool from BRE
about SMARTWastePlan | case studies | company menu... | project home | links | log out...
help
Project: Test project 1
Summary information
SWMP
Summary charts
Detailed information
Cost information
Summary by date
Cost data
Summary information
Total cost of waste removal £5130.00
Waste cost/£100K £128.25
Waste cost/100m2 £699.86
Waste cost as % of project cost 0.1 %
Waste cost/tonne £256.50
Waste cost/m3 £205.87
Detailed information
Cost of active waste / tonne £191.50
Cost of inert waste / tonne £65.00
Cost of hazardous waste / tonne £0.00
Cost of active waste / m3 £153.70
Cost of inert waste / m3 £52.17
Cost of hazardous waste / m3 £0.00
Hazardous waste removal cost as a % of total waste removal cost 0 %
Segregated waste removal cost as a % of total waste removal cost 47 %
Mixed waste removal cost as a % of total waste removal cost 52 %
Inert waste removal cost as a % of total waste removal cost 25 %
Active waste removal cost as a % of total waste removal cost 74 %
view cost log
Add cost data

Figure 4.13: Project 'Waste cost log' page


SMARTWastePlan
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help
Costs for Test project 1
Entry type | Skip size | Number of containers | Mixed | Inert | Timber | Metals | Paper/ cardboard | Hazardous | Gypsum
Overall | - | - | £1500.00 | £500.00 | £250.00 | £0.00 | £0.00 | £0.00 | £0.00
per skip | 6.12cu metre skip (8cu yd) | 8 | £150.00 | £100.00 | £110.00 | £0.00 | £0.00 | £0.00 | £0.00

5. Site Waste Management Plan Tool

5.1. Accessing your SWMP

SWMPs are unique to each project so you access it by:

- At the company homepage, click on the relevant project name
- At the project homepage click on the SWMP tab (figure 5.1)
- This will take you to the 'SWMP Home' page where you can begin your SWMP (figure 5.2 for downloadable template, figure 5.3 for online SWMP)

Figure 5.1: SWMP tab

SMARTWastePlan
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help
the waste benchmarking tool from BRE
Project: Test
Summary information
SWMP
Summary charts
Detailed information
Cost information
Summary by date
You can update any part of your SWMP at any time:

There are two formats of SWMP on SMARTWaste Plan. You choose the format when setting up your project:

- Downloadable Microsoft Word based template – download and fill in offline
- Interactive online SWMP – work through the 9 stages online (recommended)

The online version provides additional functions such as:

- a benchmark calculator to assist with forecasting of waste and comparisons of forecasts with actual waste
- interaction with the built in measurement tool for actual waste arising.

Further details on the two formats are given in sections 5.2 and 5.3.

5.2. Downloadable word template

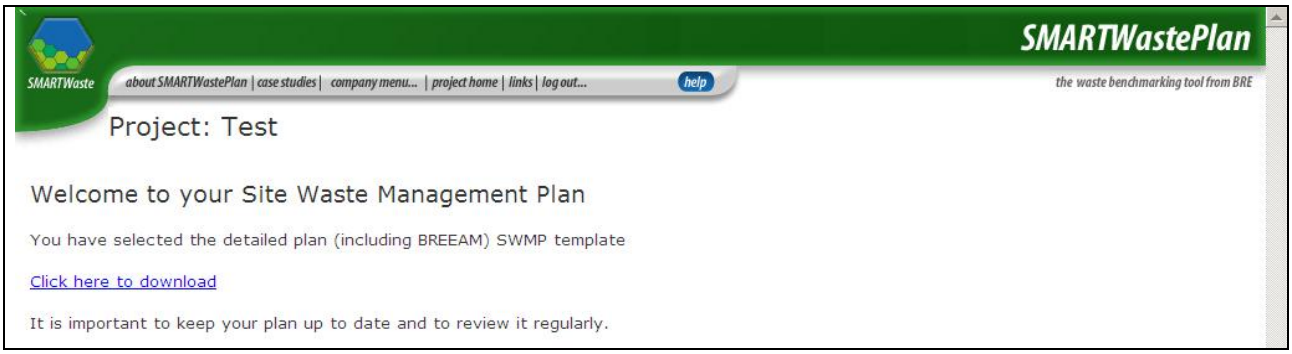
If you chose the word template format for your project[3] SWMP you will need to download the template from the 'SWMP Home' page to begin (figure 5.2):

- Click the blue link 'Click here to download'
- This will open a Microsoft Word document called 'Site Waste Management Plan – Paper copy'
- Save this template and fill it in to complete your SWMP.

Section 5.3 of this user guide relates to the online version of the SWMP but it may give you some guidance on the type of detail to include in your SWMP.

[3] For details of how to choose the format for your SWMP, see section 2.4, figure 2.5

Figure 5.2: To down the SWMP word template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SMARTWaste
about SMARTWastePlan | case studies | company menu... | project home | links | log out...
help
the waste benchmarking tool from BRE
Project: Test
Welcome to your Site Waste Management Plan
You have selected the detailed plan (including BREEAM) SWMP template
Click here to download
It is important to keep your plan up to date and to review it regularly.

5.3. Interactive online SWMP

If you have chosen the online SWMP format, the tool will take you through the steps to preparing, implementing and reviewing your project SWMP via numbered tabs which you access through the 'SWMP Home' page (figure 5.3).

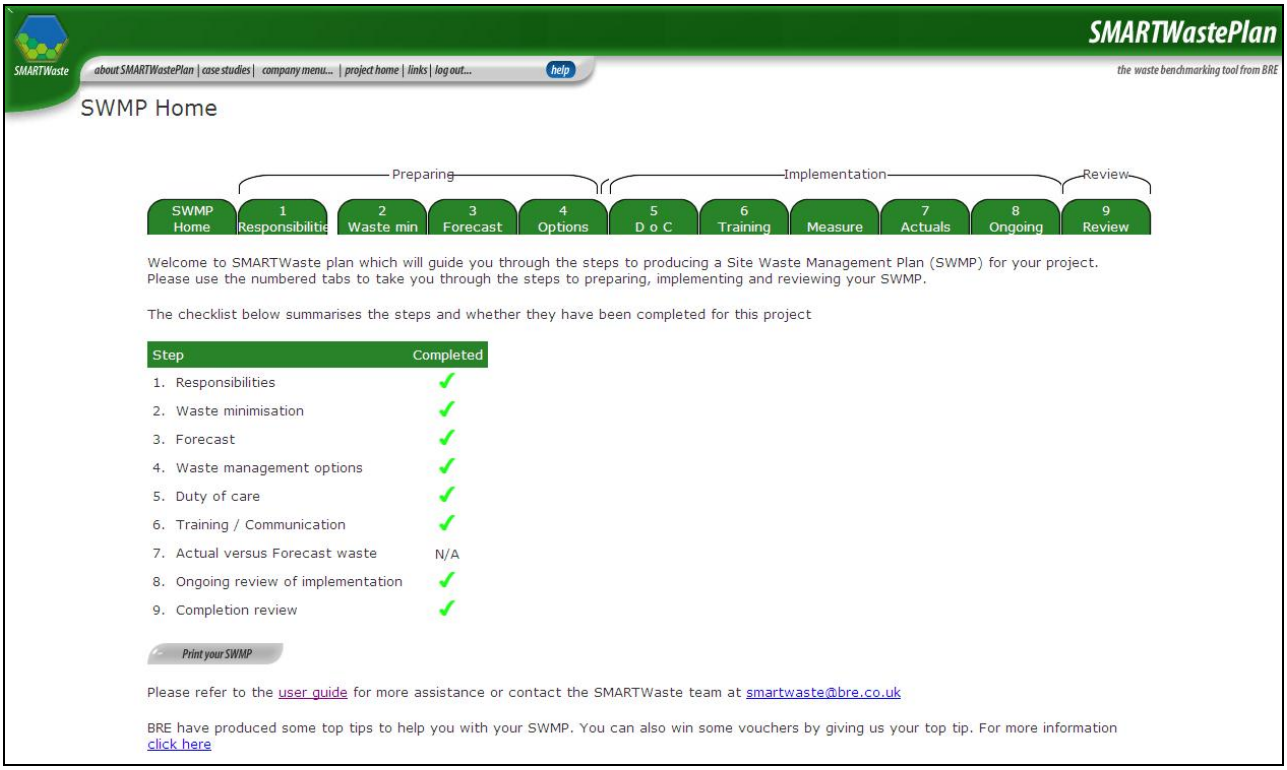
Each tab contains simple tables and text boxes that you should fill in to create your plan. By filling in all parts of each tab, you will be complying with the SWMP Regulations for your project(s).

You can update any part of your SWMP at any point by clicking on the relevant tab and editing the information entered, remember to click on the submit button at the bottom of the page to save the updated information you have entered.

A checklist is provided on the 'SWMP Home' page summarising the steps of the plan and which ones have been completed so far (shown by a tick). In order to get the tick to appear in your checklist, you will need to fill in all the relevant details on that tab, then tick the box labelled "All required information on this page has been entered" before clicking submit.

Your SWMP can be printed by clicking on the 'print your SWMP' button on the SWMP Home page.

Figure 5.3: Online SWMP Home page


SMARTWastePlan
SMARTWaste
about SMARTWastePlan | case studies | company menu... | project home | links | log out...
help
the waste benchmarking tool from BRE
SWMP Home
Preparing
Implementation
Review
SWMP Home
1 Responsibilitie
2 Waste min
3 Forecast
4 Options
5 D o C
6 Training
Measure
7 Actuals
8 Ongoing
9 Review
Welcome to SMARTWaste plan which will guide you through the steps to producing a Site Waste Management Plan (SWMP) for your project.
Please use the numbered tabs to take you through the steps to preparing, implementing and reviewing your SWMP.
The checklist below summarises the steps and whether they have been completed for this project
Step
Completed
1. Responsibilities
2. Waste minimisation
3. Forecast
4. Waste management options
5. Duty of care
6. Training / Communication
7. Actual versus Forecast waste
N/A
8. Ongoing review of implementation
9. Completion review
Print your SWMP
Please refer to the user guide for more assistance or contact the SMARTWaste team at smartwaste@bre.co.uk
BRE have produced some top tips to help you with your SWMP. You can also win some vouchers by giving us your top tip. For more information click here

5.3.1. Preparing your SWMP

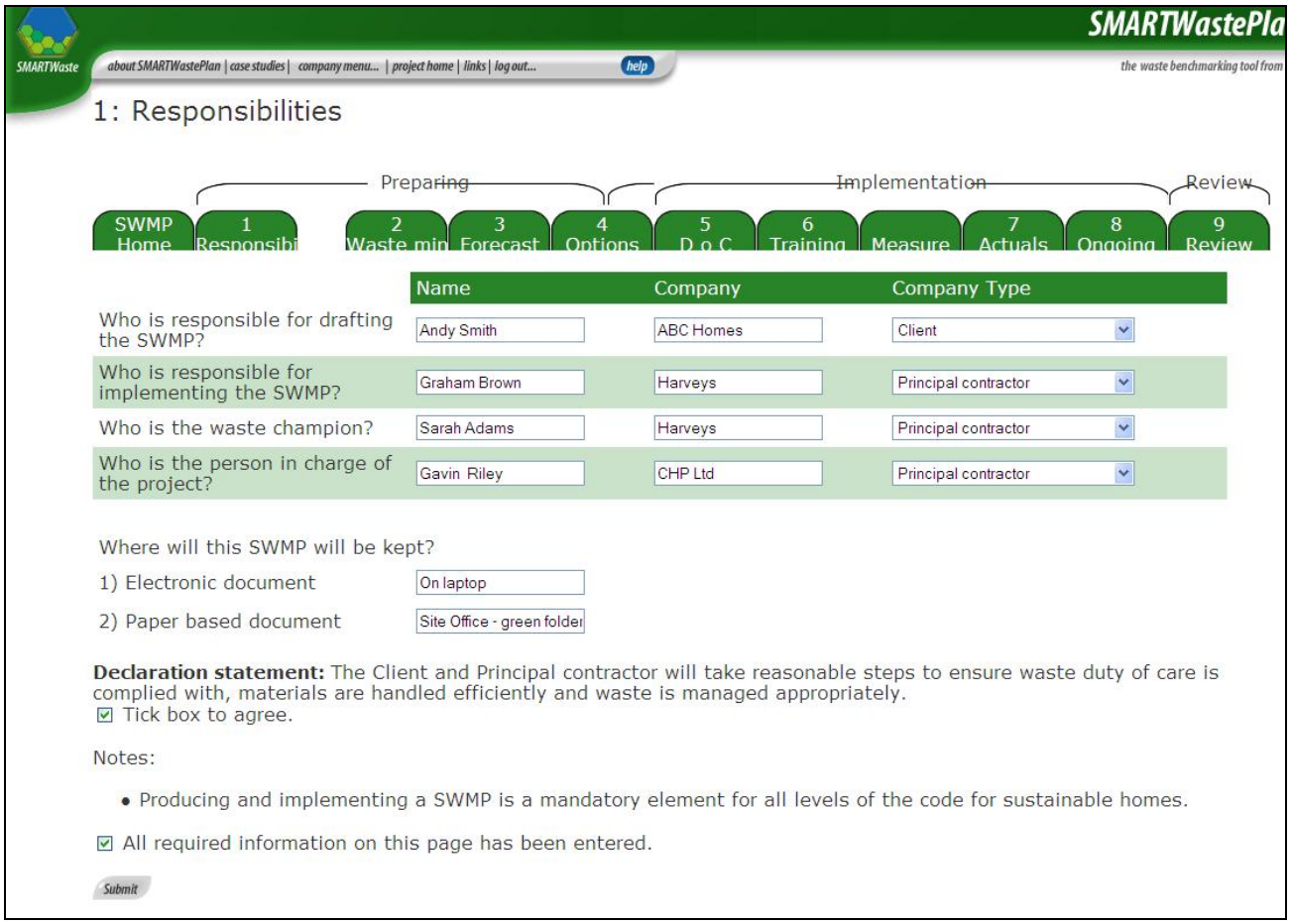
Steps 1 to 4 make up the preparation stages for your SWMP; these must be completed BEFORE construction work commences onsite.

Step 1: Responsibilities

A SWMP must have a record of who is responsible for different aspects of the SWMP (figure 5.4). Complete the table to record who has the necessary roles and responsibilities.

The SWMP regulations require the Client and Principal Contractor to declare to take reasonable steps to ensure waste duty of care is complied with, materials are handled efficiently and waste is managed appropriately. Tick the box to confirm that you agree to do this.

Figure 5.4: Online SWMP – step 1: Responsibilities



Step 2: Waste minimisation

Waste minimisation is about trying to reduce the amount of waste that will be produced (i.e. prevent waste arising).

It is an important part of SWMPs and the regulations require that you keep a record of any waste minimisation decisions taken with regards to the nature of the project, design, construction methods and materials.

A table is provided on this tab to record these details. Click the 'Add' button (Figure 5.5) to go to the 'Edit waste minimisation' page (figure 5.6) where you enter the details of waste minimisation decisions taken. When finished, click the 'Submit' button.

Figure 5.5: Online SWMP – step 2: Waste Minimisation

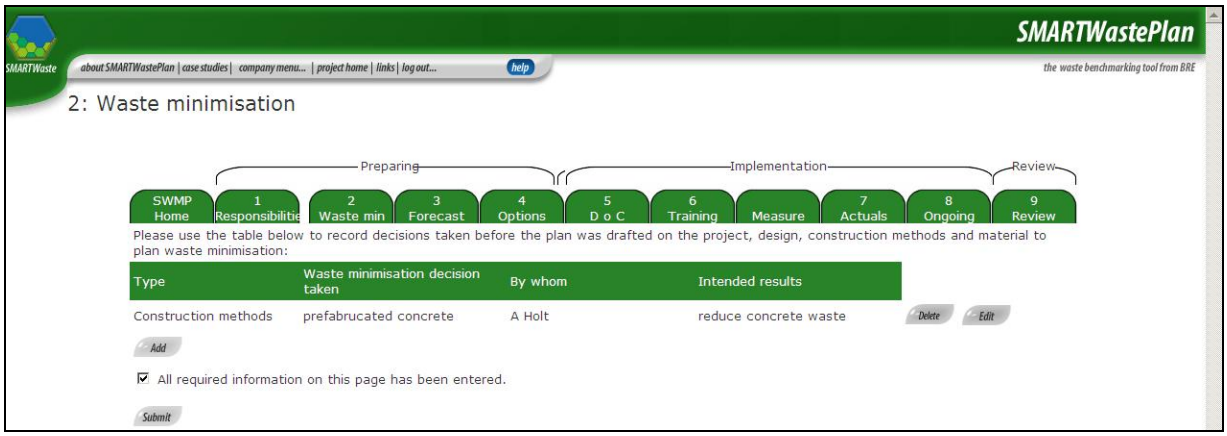
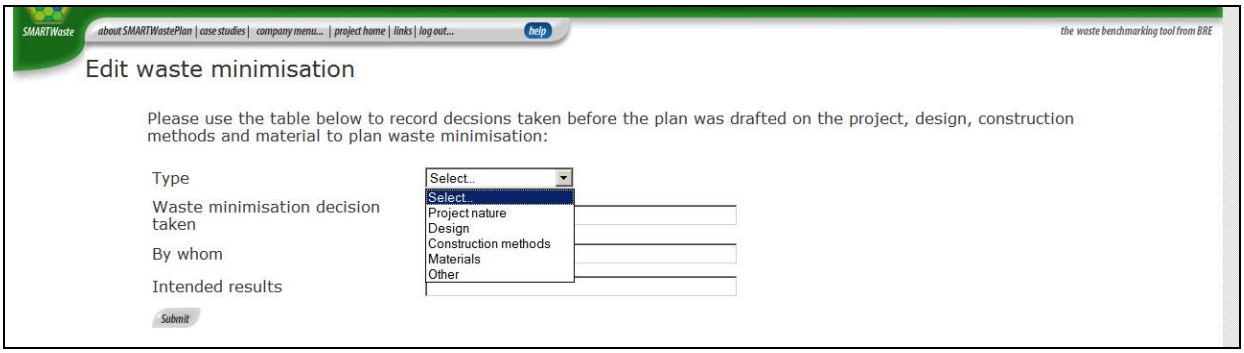


Figure 5.6: Online SWMP – step 2: Edit Waste Minimisation


about SMARTWastePlan | case studies | company menu... | project home | links | log out...
help
the waste benchmarking tool from BRE
Edit waste minimisation
Please use the table below to record decsions taken before the plan was drafted on the project, design, construction methods and material to plan waste minimisation:
Type
Waste minimisation decision taken
By whom
Intended results
Select...
Select...
Project nature
Design
Construction methods
Materials
Other
Submit

Step 3: Forecast of waste

The SWMP regulations require you to estimate the type and quantity of waste you expect to be generated on a project.

Use the table to record the types and amounts of waste you forecast will be generated. Click the 'Add' button to make an entry.

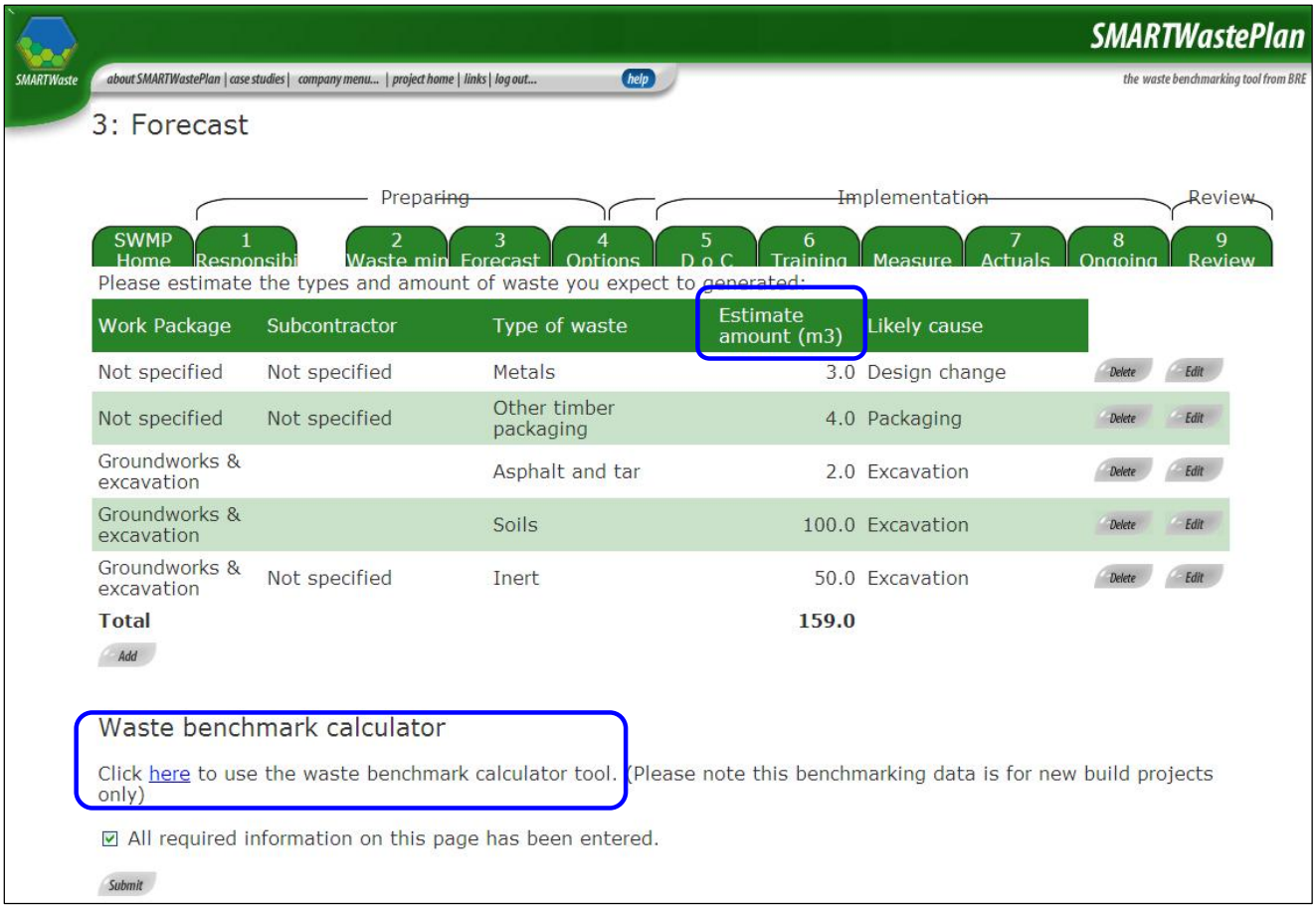
This information can be linked up to the work packages, likely causes, and any relevant subcontractors for the waste type (figure 5.7a if collecting waste data in volume and figure 5.7b if collecting waste data in tonnes). If you have not yet entered any subcontractor's details, you will first need to do this at the company level then assign them to your project (see sections 2.7 and 4.4).

If you need to change any details once they have been added, click on the 'Edit' button next to the entry on the SWMP - Forecast page, it will take you to the 'Edit forecast' page (figure 5.8).

A benchmarking calculator is provided on the forecast tab to help you estimate the waste generated on site if you don't have previous data to use. Click on the link to access the benchmark calculator. This will open a new window (figure 5.9) with typical construction waste arisings for new build projects calculated based on your project's floor area and project type. These can be used as a guide, but may need adjusting for the specifics of your project.

The BRE waste benchmarking data used in the benchmark calculator are updated and refined bimonthly. For more information about this, please visit www.smartwaste.co.uk/page.jsp?id=37

Figure 5.7a: Online SWMP – step 3: Forecast of Waste (if collecting waste data in volume)


SMARTWastePlan
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3: Forecast
Preparing
Implementation
Review
SWMP Home
1 Responsibi
2 Waste min
3 Forecast
4 Options
5 D o C
6 Training
Measure
7 Actuals
8 Ongoing
9 Review
Please estimate the types and amount of waste you expect to generated:
Work Package
Subcontractor
Type of waste
Estimate amount (m3)
Likely cause
Not specified Not specified Metals 3.0 Design change Delete Edit
Not specified Not specified Other timber packaging 4.0 Packaging Delete Edit
Groundworks & excavation Asphalt and tar 2.0 Excavation Delete Edit
Groundworks & excavation Soils 100.0 Excavation Delete Edit
Groundworks & excavation Not specified Inert 50.0 Excavation Delete Edit
Total 159.0
Add
Waste benchmark calculator
Click here to use the waste benchmark calculator tool. (Please note this benchmarking data is for new build projects only)
All required information on this page has been entered.
Submit

Figure 5.7b: Online SWMP – step 3: Forecast of Waste (if collecting waste data in tonnes)

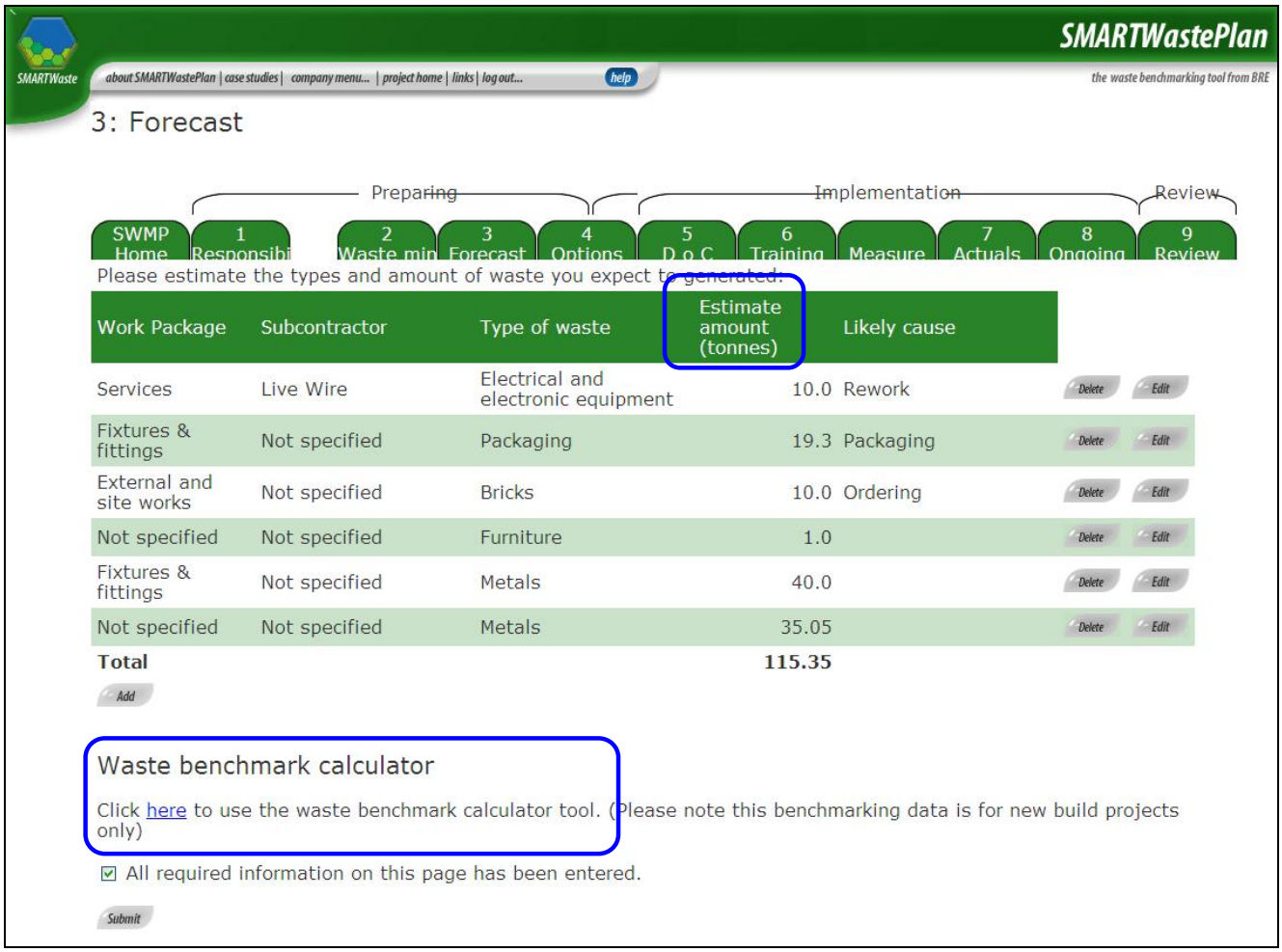


Figure 5.8: Online SWMP – step 3: Edit Forecast of Waste

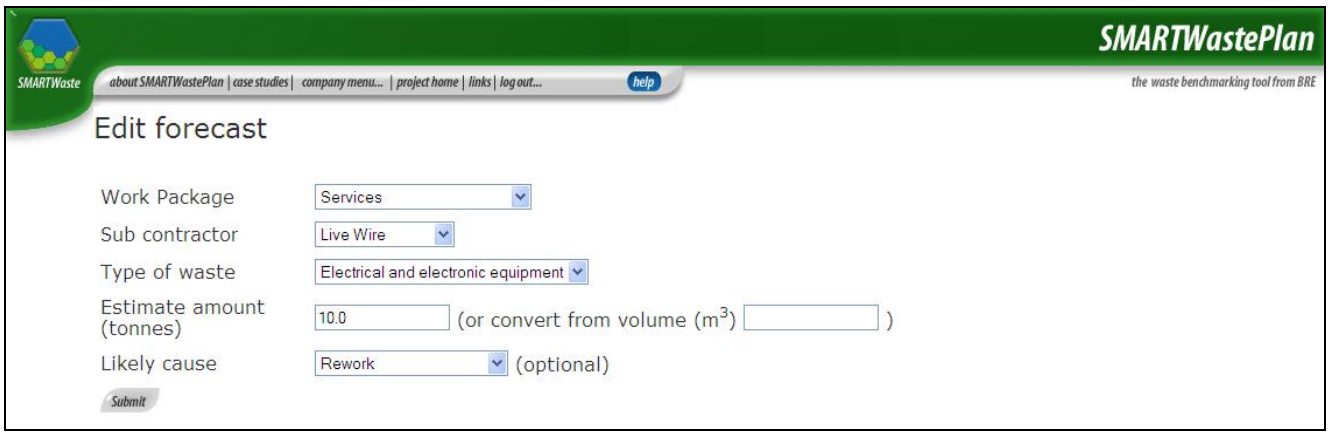
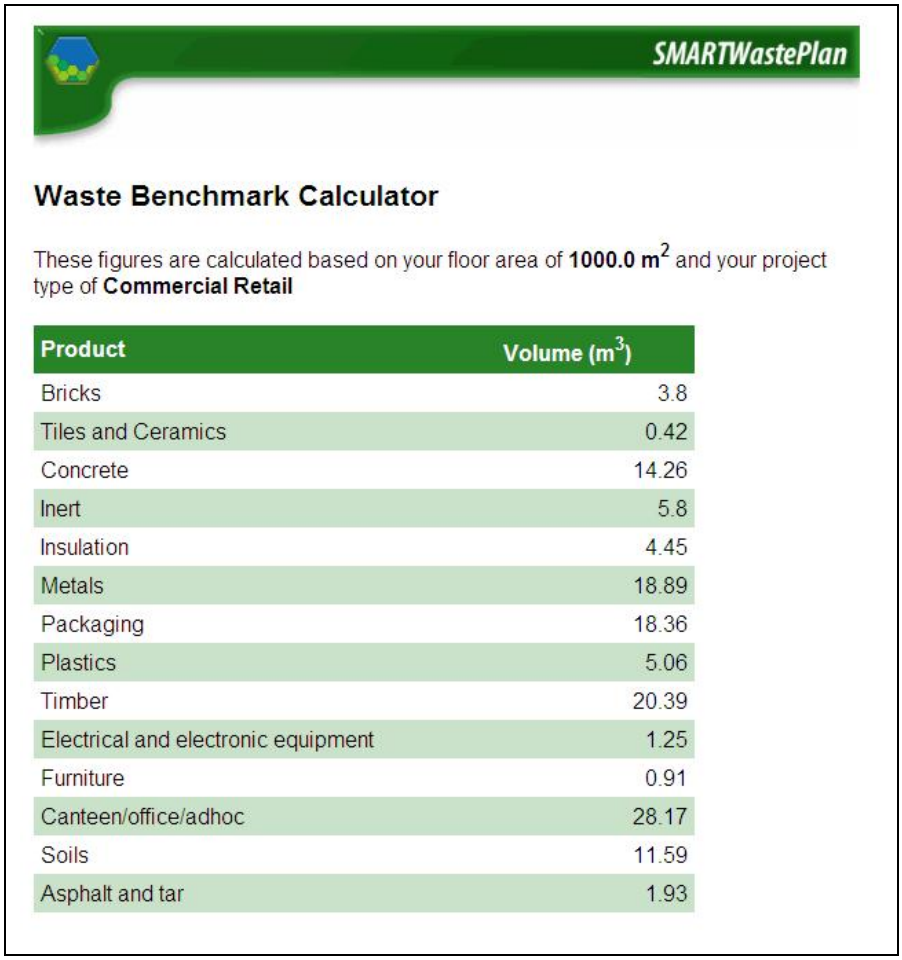


Figure 5.9: Online SWMP – step 3: Waste Benchmark Calculator

(currently for new build projects only)



SMARTWastePlan

Waste Benchmark Calculator

These figures are calculated based on your floor area of **1000.0 m^2** and your project type of **Commercial Retail**

Product	Volume (m^3)
Bricks	3.8
Tiles and Ceramics	0.42
Concrete	14.26
Inert	5.8
Insulation	4.45
Metals	18.89
Packaging	18.36
Plastics	5.06
Timber	20.39
Electrical and electronic equipment	1.25
Furniture	0.91
Canteen/office/adhoc	28.17
Soils	11.59
Asphalt and tar	1.93

Step 4: Waste management options

Once you have estimated the amounts of waste you think will be generated, you then need to consider how you will manage these waste streams.

For each waste stream you expect to arise, you should estimate the percentage of each that you plan to reduce, reuse, recycle, recover or dispose and whether this will take place onsite or offsite, along with a brief description of how you will achieve this. Use the table provided to record the information, using the 'add' button to enter a new row of information (figure 5.10 and figure 5.11).

There is also a facility on this page to upload a drawing of your site layout showing locations of waste and materials storage areas to show that you are complying with the declaration made in step 1.

Figure 5.10: Online SWMP – step 4: Waste management options

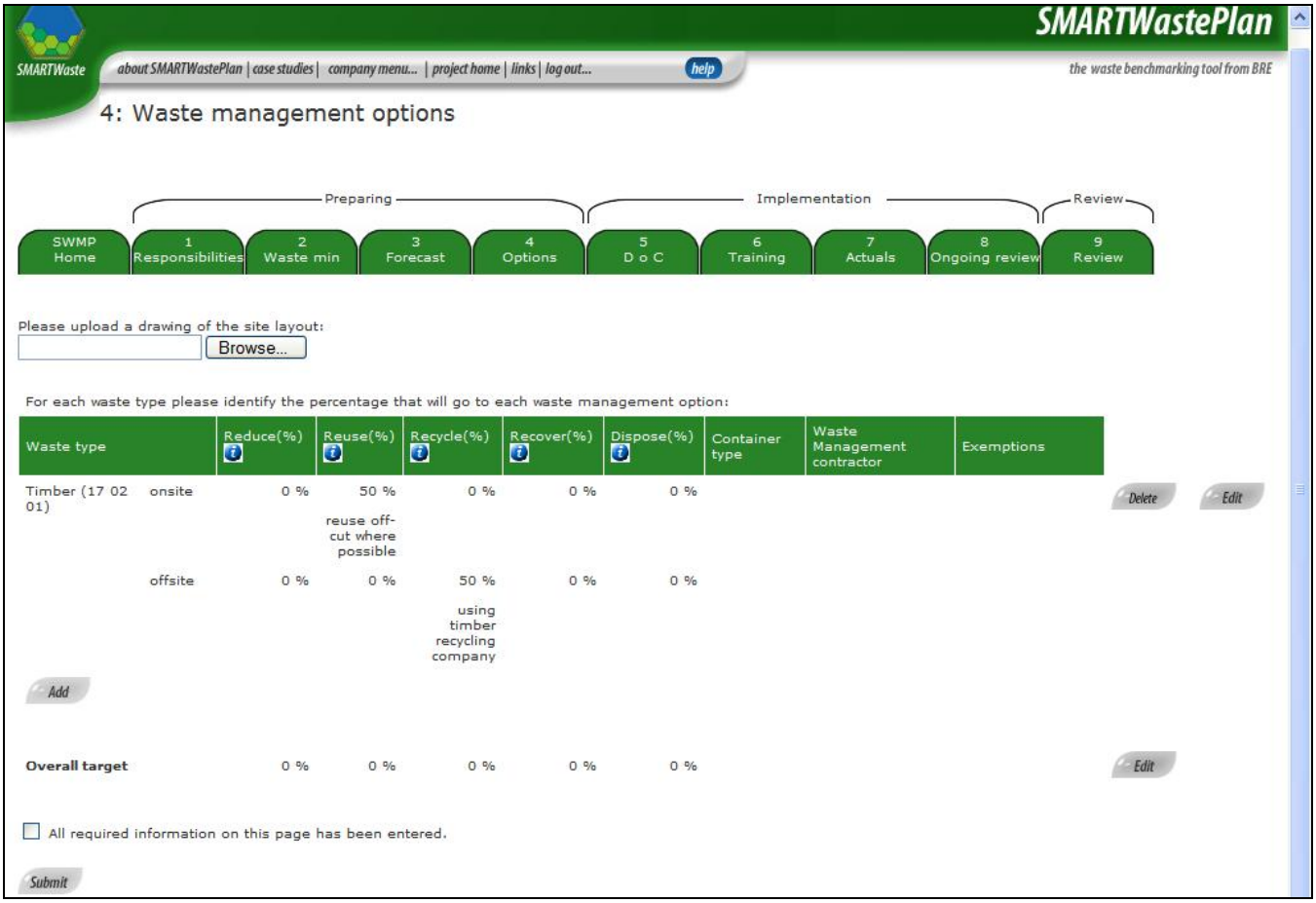
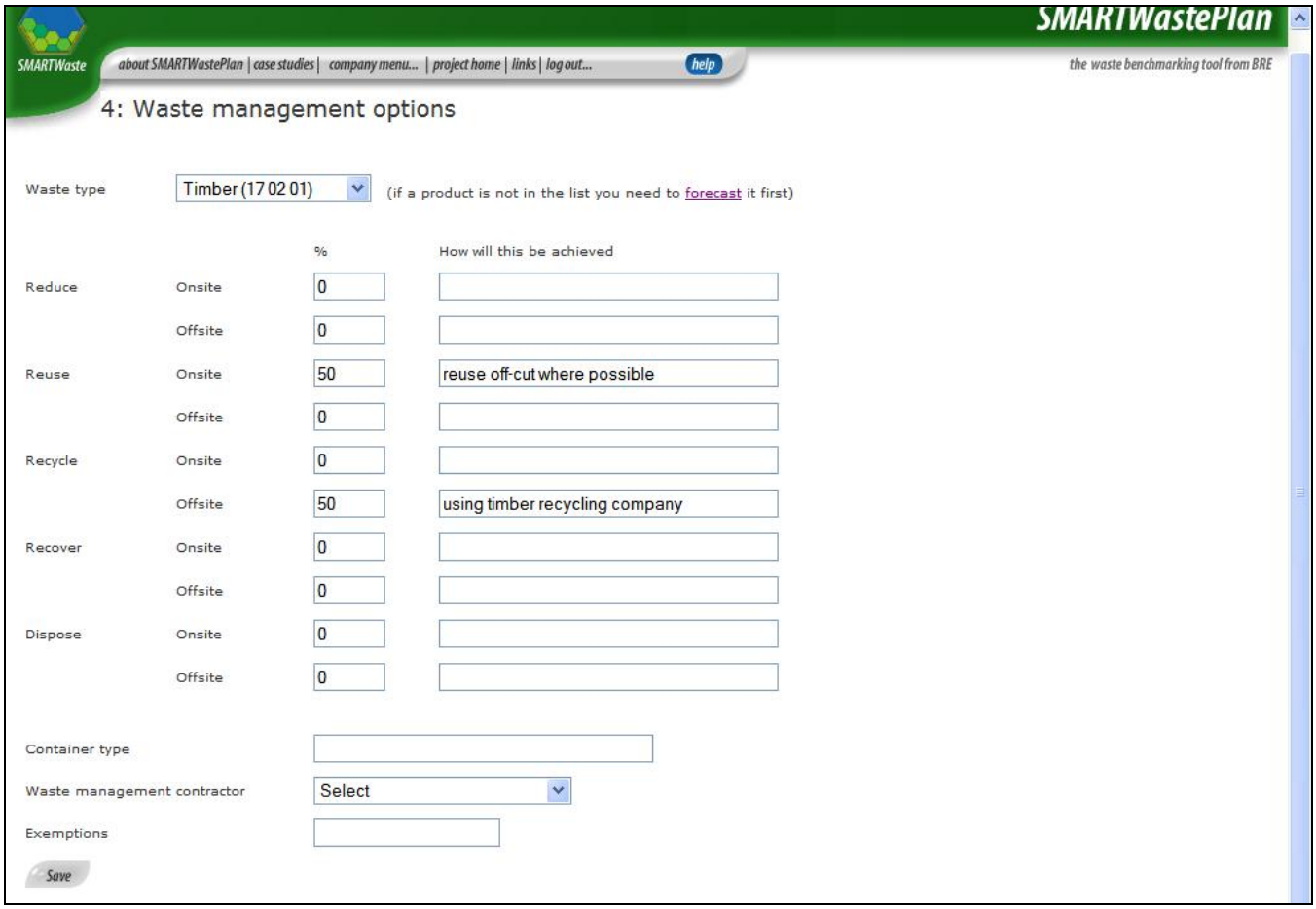


Figure 5.11: Online SWMP – step 4: Add/Edit Waste management options



5.3.2. Implementing your SWMP

Steps 5 to 8 make up the implementation phase of your SWMP and relate to when construction work has commenced onsite.

Step 5: Duty of Care

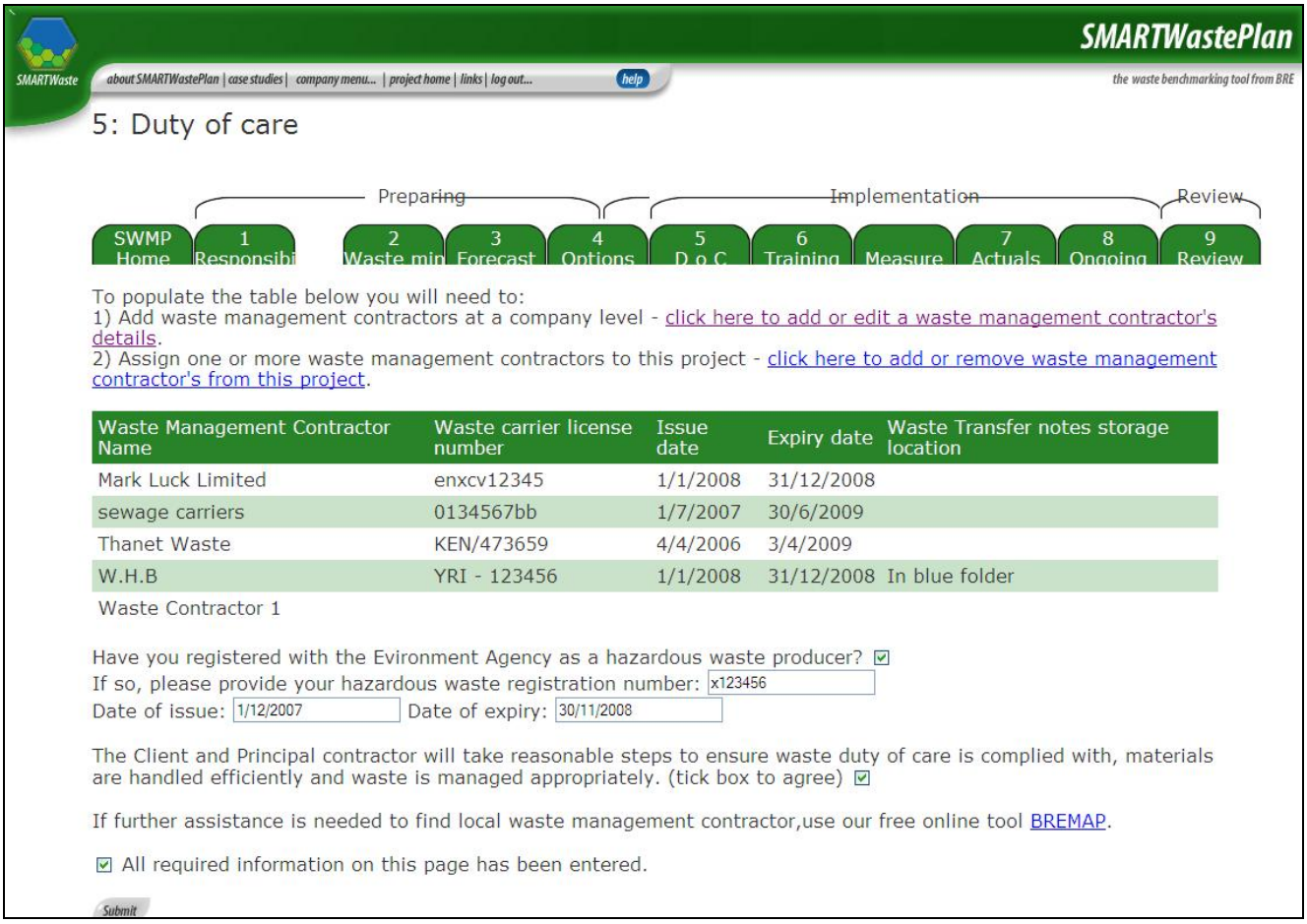
It is important to keep a record of what waste management contractors you are using and confirm that they have the necessary licenses such as waste carriers licences and waste management facility licenses. You should ensure that these licenses are in date which can be done by visiting the Environment Agency website (a link is provided on the 'add waste management contractors' page of SMARTWaste Plan). You should keep copies of Waste Transfer Notes (WTNs) that accompany every waste movement, for a minimum of 2 years.

The 'Duty of Care' tab (figure 5.12) summarises the duty of care information for your project based on waste contractors entered at a company level that have been assigned to the project (see section 2.6 and 4.3).

In addition you need to make a note of whether you are registered as a hazardous waste producer and your registration details if you are.

If further assistance is needed to find local waste management contractor, you can use our free online tool called BREMAP (www.bremap.co.uk).

Figure 5.12: Online SWMP – step 5: Duty of Care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the waste benchmarking tool from BRE
5: Duty of care
Preparing
Implementation
Review
SWMP Home
1 Responsibi
2 Waste min
3 Forecast
4 Options
5 D o C
6 Training
Measure
7 Actuals
8 Ongoing
9 Review
To populate the table below you will need to:
1) Add waste management contractors at a company level - click here to add or edit a waste management contractor's details.
2) Assign one or more waste management contractors to this project - click here to add or remove waste management contractor's from this project.
Waste Management Contractor Name
Waste carrier license number
Issue date
Expiry date
Waste Transfer notes storage location
Mark Luck Limited
enxcv12345
1/1/2008
31/12/2008
sewage carriers
0134567bb
1/7/2007
30/6/2009
Thanet Waste
KEN/473659
4/4/2006
3/4/2009
W.H.B
YRI - 123456
1/1/2008
31/12/2008
In blue folder
Waste Contractor 1
Have you registered with the Evironment Agency as a hazardous waste producer?
If so, please provide your hazardous waste registration number: x123456
Date of issue: 1/12/2007
Date of expiry: 30/11/2008
The Client and Principal contractor will take reasonable steps to ensure waste duty of care is complied with, materials are handled efficiently and waste is managed appropriately. (tick box to agree)
If further assistance is needed to find local waste management contractor,use our free online tool BREMAP.
All required information on this page has been entered.
Submit

Step 6: Training and communication

Ensuring that the workforce is informed about the SWMP is part of the additional duties within the SWMP regulations.

This tab enables you to log details of the types of training and communication you are using on the project, and to keep a training log (either by uploading a document or filling in the table provided) (figure 5.13 and figure 5.14).

Figure 5.13: Online SWMP – step 6: Training and communication

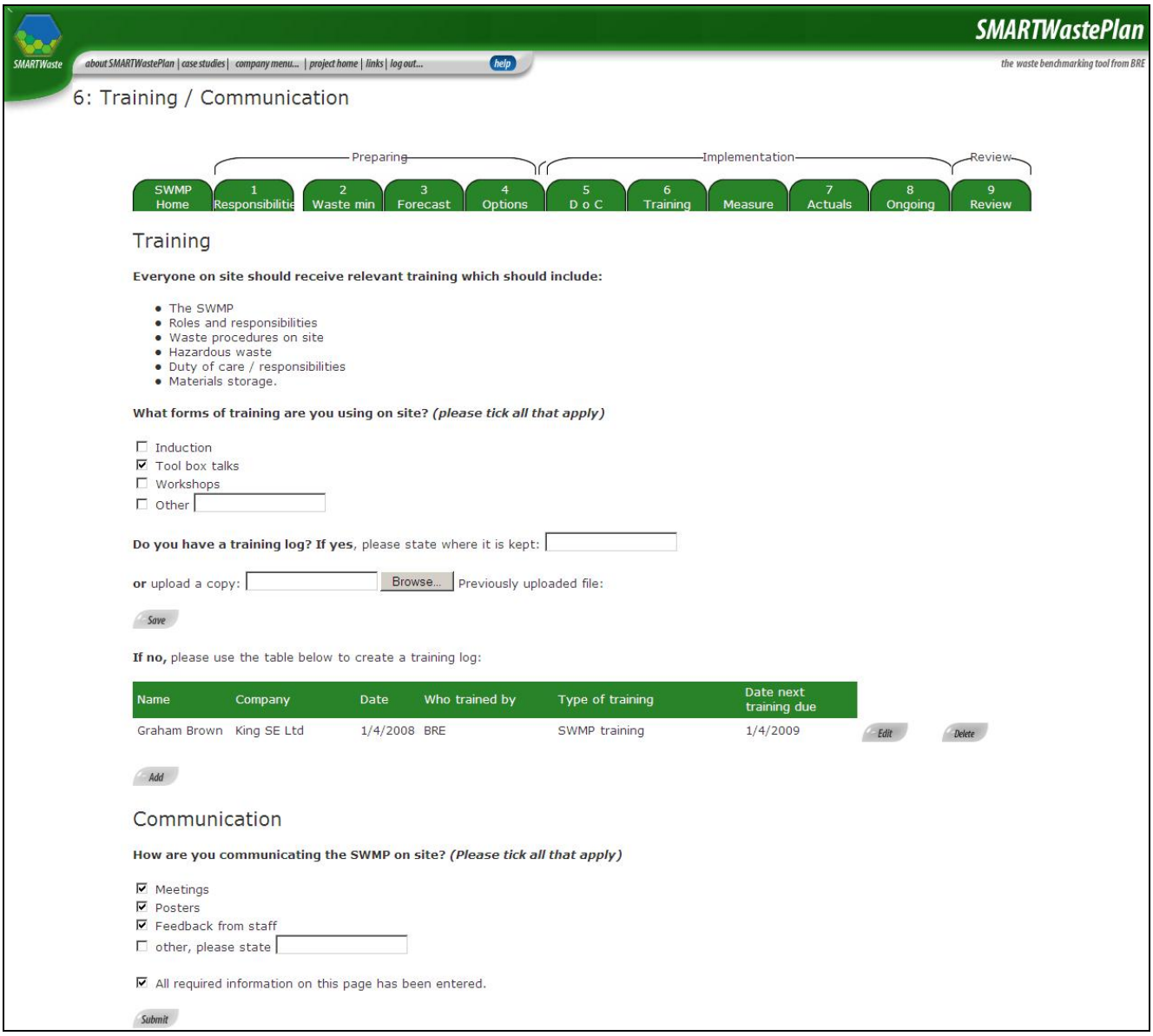


Figure 5.14: Online SWMP – step 6: Edit training log

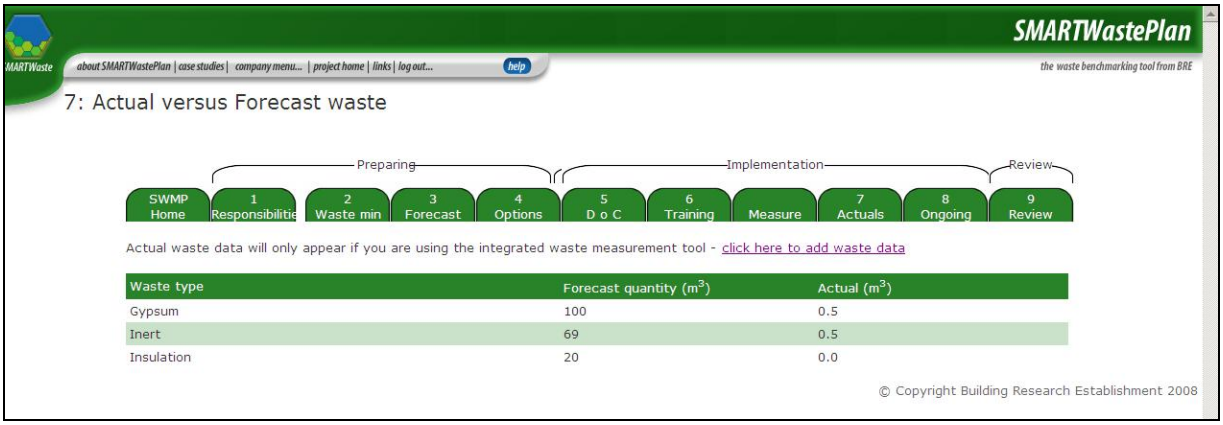
Step 7: Comparison of actual waste with forecast waste

The SWMP regulations require that whenever waste is removed from site you must record certain details such as the identity of the person removing the waste, the type of waste that is removed, and the waste site/facility that it is going to.

You can use the integrated waste measurement tool (see section 6) to record this information by clicking on the ‘click here to add waste data link’ at the top of the page.

If you use the waste measurement tool, the ‘Actual versus forecast waste’ tab (figure 5.15) will automatically summarise the actual types and amounts of waste against those you forecast would be generated in step 3.

Figure 5.15: Online SWMP – step 7: Actual versus forecast waste



Step 8: Ongoing review of implementation

Your SWMP should be reviewed regularly to see if the plan accurately reflects the progress of the project. Information should be updated as necessary. A plan should be reviewed *at least* every six months.

This tab provides a simple form to record when the SWMP was reviewed and what the outcome was (e.g. was any information updated/changed) (figure 5.16 and figure 5.17).

Filling in information on this step will mean that you will be able to comply with a declaration in step 9.

Figure 5.16: Online SWMP – step 8: Ongoing review of implementation

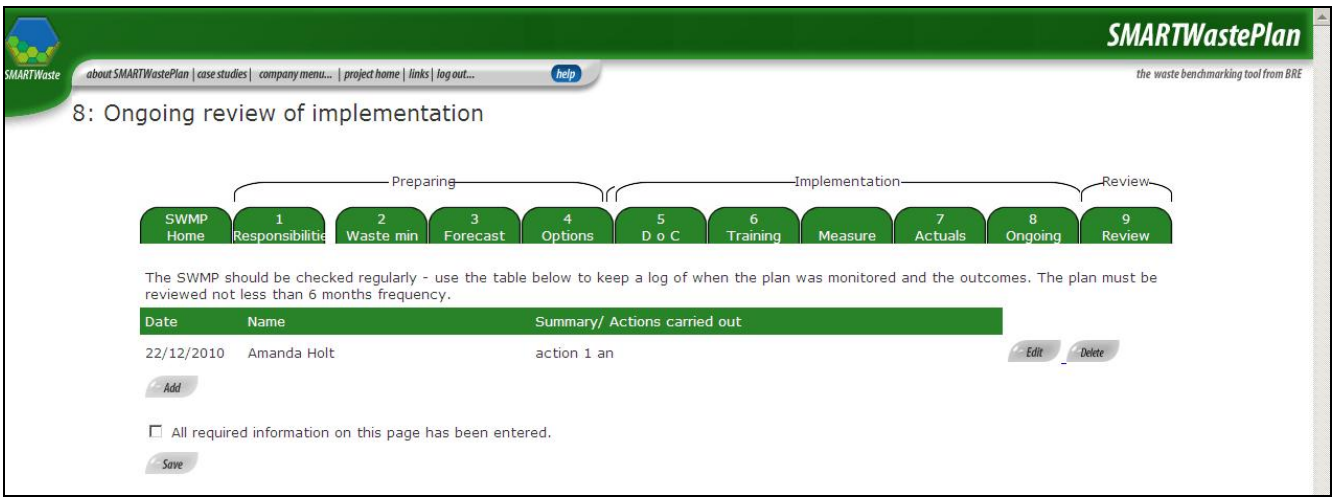
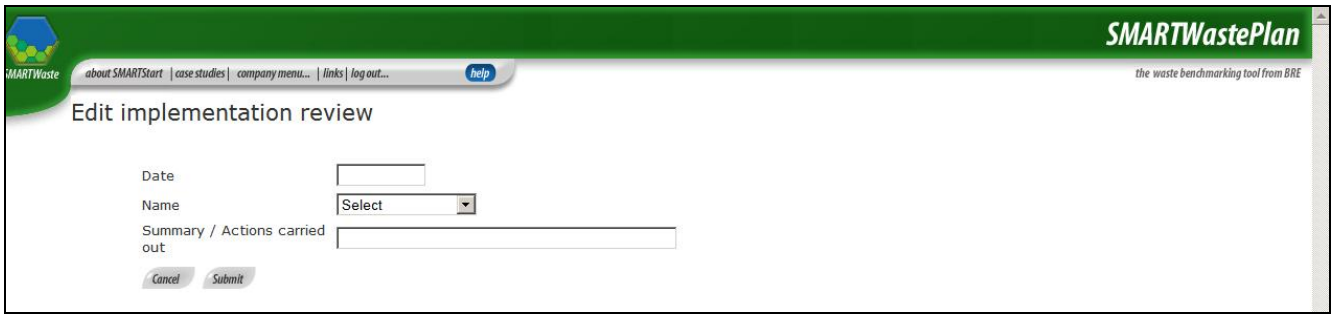


Figure 5.17: Online SWMP – step 8: Edit implementation review



5.3.3. Reviewing your SWMP

The SWMP regulations require that your SWMP must be reviewed within 3 months of construction work being completed on your project.

Step 9: Completion review

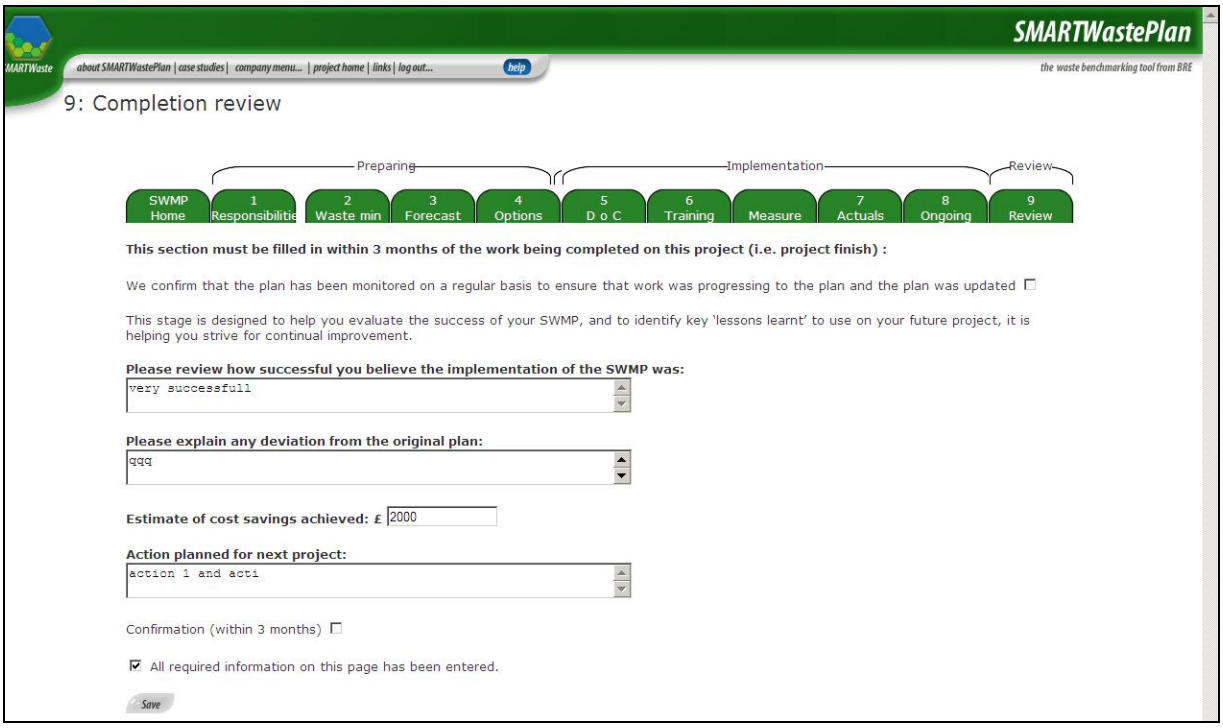
The principal contractor must confirm that the plan has been monitored on a regular basis to ensure that work was progressing to the plan and that the plan was updated. Tick the box to confirm this. The information you entered in steps 7 and 8 will back up this declaration.

The review requirements are slightly different depending on the value of the project.

For projects with a value of between £300k and £500k, the following boxes are provided to help you record the necessary details:

- how successful you believe implementation of the SWMP was
- explanation of any deviations from the original plan
- any actions planned for future projects (figure 5.18).

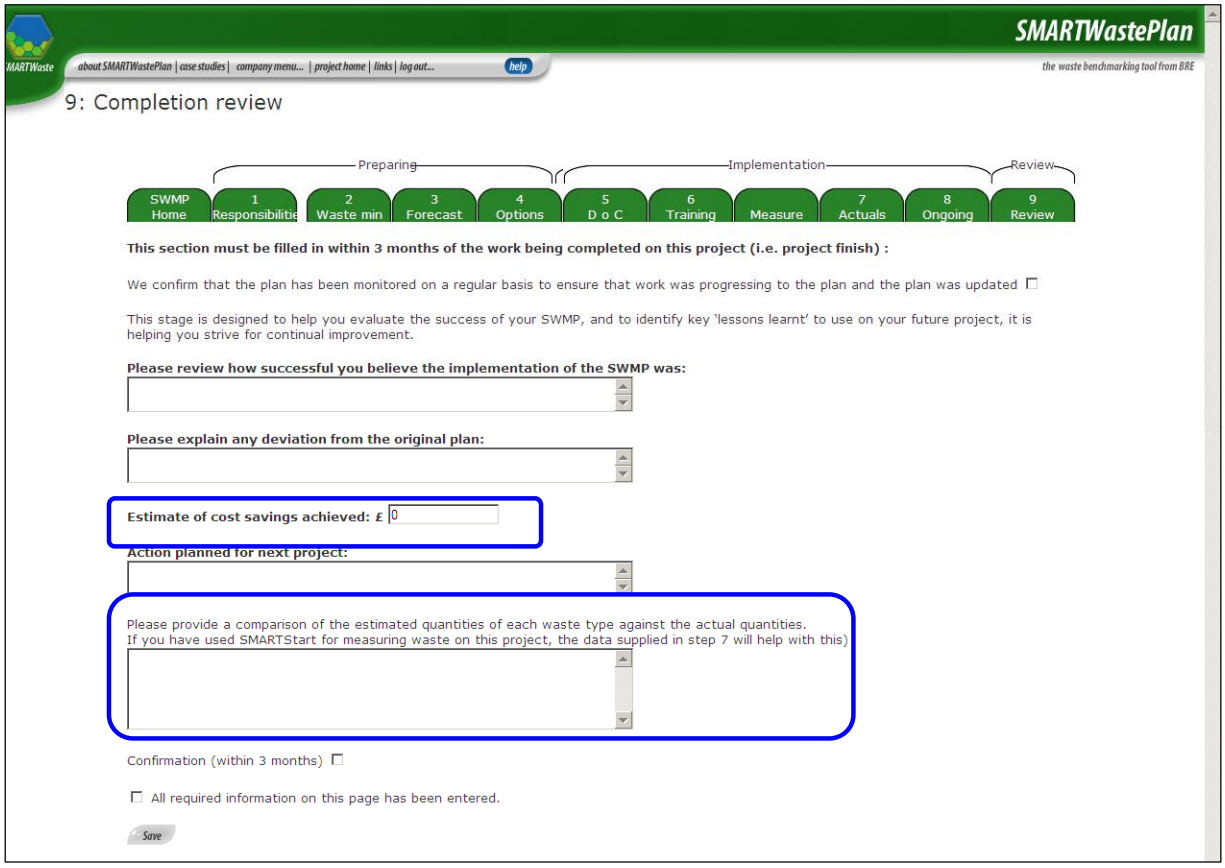
Figure 5.18: Online SWMP – step 9: Completion review (for project values between £300k to £500K)


SMARTWastePlan
about SMARTWastePlan | case studies | company menu... | project home | links | log out...
help
the waste benchmarking tool from BRE
9: Completion review
Preparing
Implementation
Review
SWMP Home
1 Responsibilitie
2 Waste min
3 Forecast
4 Options
5 D o C
6 Training
Measure
7 Actuals
8 Ongoing
9 Review
This section must be filled in within 3 months of the work being completed on this project (i.e. project finish) :
We confirm that the plan has been monitored on a regular basis to ensure that work was progressing to the plan and the plan was updated
This stage is designed to help you evaluate the success of your SWMP, and to identify key 'lessons learnt' to use on your future project, it is helping you strive for continual improvement.
Please review how successful you believe the implementation of the SWMP was:
very successfull
Please explain any deviation from the original plan:
qqq
Estimate of cost savings achieved: £ 2000
Action planned for next project:
action 1 and acti
Confirmation (within 3 months)
All required information on this page has been entered.
Save

For projects with a value of over £500k, there are 2 additional boxes to be completed (figure 5.19):

- a comparison of the estimated quantities of each waste type against the actual quantities – if you have used the integrated waste measurement tool, step 7 will help you complete this
- an estimate of the cost savings achieved.

Figure 5.19: Online SWMP – step 9: Completion review (for project value of over £500K)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help
9: Completion review
Preparing
Implementation
Review
SWMP Home
1 Responsibilitie
2 Waste min
3 Forecast
4 Options
5 D o C
6 Training
Measure
7 Actuals
8 Ongoing
9 Review
This section must be filled in within 3 months of the work being completed on this project (i.e. project finish) :
We confirm that the plan has been monitored on a regular basis to ensure that work was progressing to the plan and the plan was updated
This stage is designed to help you evaluate the success of your SWMP, and to identify key 'lessons learnt' to use on your future project, it is helping you strive for continual improvement.
Please review how successful you believe the implementation of the SWMP was:
Please explain any deviation from the original plan:
Estimate of cost savings achieved: £ 0
Action planned for next project:
Please provide a comparison of the estimated quantities of each waste type against the actual quantities.
If you have used SMARTStart for measuring waste on this project, the data supplied in step 7 will help with this)
Confirmation (within 3 months)
All required information on this page has been entered.
Save

6. Waste Measurement

SMARTWaste Plan has an integrated waste measurement tool to enable easy collection and recording of wastes arising from projects including types, quantities and waste management routes.

Waste measurement involves a two stage process of collecting the waste data on site and then entering the data onto your web-based account. The data entered is used to generate waste performance indicators for individual projects/sites and on a company-wide basis.

This section provides an introduction to the features and functions of using the waste measurement tool so that you can begin measuring and adding waste for your projects.

6.1. Collecting & adding waste data

Section 6.1 provides you with details on how to collect the waste data on site and how to add this data onto a project within your SMARTWaste Plan account.

6.1.1. Collecting waste data on site

The tool uses 22 waste product groups that have been developed to facilitate easy data entry, as on many construction sites there can be thousands of individual products in use.

Table 6.1 gives an example of some of the products covered by each product group. Please note this list is not exhaustive.

Table 6.1: Examples of products in the groups

Waste product group	Examples of products in the group
Bricks	Bricks
Tiles and ceramics	Ceramic tiles, clay roof tiles, ceramic toilets and sinks
Electrical equipment	TVs, fridges, air conditioning units, lamps
Inert	Aggregates, stones, gravel slates, glass, rubble/hardcore
Metals	Copper, aluminium, lead, zinc, iron/steel, tin, mixed metal
Packaging	Cardboard, bubble wrap, wrapping bands, polystyrene, paper, cable drums, pallets
Floor coverings (soft)	Carpets, vinyl
Plastic	Gutters, downpipes, DPC, PVC-U windows and doors, socket boxes
Concrete	Concrete pipes, kerb stones, paving slabs, concrete, solid blocks
Furniture	Tables, chairs, desks, sofas, blinds, carpets
Insulation	Glass fibre, mineral wool, purlboard, breather paper
Canteen/office/ad-hoc	Office and canteen waste, vegetation, sweepings, ad-hoc materials
Gypsum	Plasterboard, ceiling tiles, plaster
Binder	Cement, render, mortar
Timber	Plywood, chipboard, noggins, battens, doors and windows, MDF
Oil (Liquids and Oils)	Hydraulic oil, engine oil, lubricating oil, transmission oil, mould oil, interceptor waste
Liquids	liquid fuel, cleaning agents
Soils	Sand, clay, subsoil, topsoil, dredgings, railway ballast
Asphalt and tar	Bitumen, asphalt, tar
Hazardous Materials	Paint pots, line markers, creosoted timber, asbestos, radioactive waste, bituminous mixtures with coal tar, tarred products, PCB or Mercury coated products, fluorescent light tubes
Other	Any waste not covered by the other categories
Mixed*	Mixed construction and demolition waste

If you are segregating wood on site, then timber packaging can be entered into the timber category rather than the packaging category as it will then count towards your segregated waste and recycling figures.

Table 6.2 gives the container/skip sizes used in the waste measurement tool. If your container/skip type is not listed, please contact the SMARTWaste team to get it included.

Table 6.2: Container / skip sizes

1cu metre bag
1100 litre wheelie bin
3cu metre skip (4cu yd)
4.6cu metre skip (6cu yd)
6.12cu metre skip (8cu yd)
9.17cu metre skip (12cu yd)
10.7cu metre compactor (14cu yd)
11.5cu metre skip (15cu yd)
15.3cu metre skip (20cu yd)
22.94cu metre skip (30cu yd)
30.58cu metre skip (40cu yd)
240 litre wheelie bin
760 litre wheelie bin
10cu metre truck
3000 litre tanker (3cu metre)
660 litre wheelie bin
20cu metre truck
500 litre tanker
1000 litre tanker
360 litre wheelie bin
1.5cu metre skip (2cu yd)
12.23cu metre skip (16cu yd)
7.65cu metre REL (10cu yd)
26.8cu metre skip (35 cu yd)
7.6cu metre truck (10 cu yd)
0.8cu metre container (1.05 cu yd)
15.3cu metre truck (20cu yd)
19.11cu metre skip (25 cu yd)
10.7cu metre skip (14 cu yd)
7.5 tonne truck
Stockpile
Bulkers
Roll on Roll off
Bagged waste
Builder skips
0.25cu metre bag
1.5cu metre bag
4cu metre bag
1.15cu metre bag (1.5cu yd)
0.76cu metre bag (1cu yd)
3cu metre bag (4cu yd)
19.115cu metre skip (25cu yd)
18160 litre tanker (18.16cu metre)
7.6cu metre skip (10cu yd)
995cu metre stockpile
6cu metre truck
4cu metre truck
709cu metre stockpile

Collecting waste data on site in volume

To collect data in volume, the person responsible for the container leaving site makes a note of its contents by visually estimating the percentage of the 22 product groups within the container.

To help with data collection, a paper based form can be downloaded from the ‘Add waste data’ page, an example is also show in figure 6.1.

The completed paper forms can be collated ready for inputting the data entered onto the relevant SMARTWaste Plan project (see section 6.1.2).

Figure 6.1: SMARTWaste Plan – Paper based waste data collection form in volume

Project name	
Date	
Waste management contractor - carrier	
Waste management contractor - destination	
Subcontractor	
Waste Transfer Note (WTN) number (can be added later if not known now)	
Container reference	
Container size/ type	

Has waste been compacted? (tick one)

☐ Normal / Uncompacted (40% void space) ☐ Slightly compacted (25% void space)

☐ Machine compactor (5% void space) ☐ Other – specify % void space: _____

Number of containers	
Overall weight of containers in tonnes* (can be added later if not known now)	

Work package that the waste is coming from (tick one):

☐ Not specified ☐ Soft strip ☐ Asbestos removal ☐ Demolition

☐ Remediation ☐ Groundworks & excavation ☐ Construction ☐ Substructure

☐ Superstructure ☐ Fixtures & fittings ☐ Services ☐ External and site works

Waste management route - is the container being sent for (tick one):

☐ Reuse ☐ Recycling ☐ Recovery (sorting/composting/incineration) ☐ Disposal (landfill)

Is this happening (tick one): ☐ On site ☐ Off site

Is the container segregated? ☐

Enter percentage composition of wastes below (in 5% increments):

Bricks (170102)	%	Tiles and Ceramics (170103)	%
Concrete (170101)	%	Inert (1701)	%
Insulation(170604)	%	Metals	%
Packaging (1501)	%	Gypsum (170802)	%
Binder (10)	%	Plastics (170203)	%
Timber (170201)	%	Floor coverings (soft)	%
Electrical and electronic equipment (1602)	%	Furniture (200307)	%
Canteen/office/adhoc (200301)	%	Liquids	%
Oils (1301)	%	Soils (1705)	%
Asphalt and tar (1703)	%	Hazardous Materials	%
Other	%	Mixed (170904) **	%

* 1 tonne = 1000 kg

** Please only use the “Mixed” category if absolutely necessary.

Collecting waste data on site in tonnes

If waste data is being collected in tonnes**,** it is likely that this data is being provided by the waste management contractor. Ask them to provide data in as much detail as possible for the 22 product categories.

Figure 6.2 is an example paper based waste data collection form for tonnes. A copy can also be downloaded from the 'Add waste data' page.

Figure 6.2: SMARTWaste Plan – Paper based waste data collection form in tonnes

Project name	
Date	
Waste management contractor - carrier	
Waste management contractor - destination	
Subcontractor	
Waste Transfer Note (WTN) number (can be added later if not known now)	
Container reference	
Container size/ type	
Number of containers	

Work package that the waste is coming from (tick one):

☐ Not specified ☐ Soft strip ☐ Asbestos removal ☐ Demolition
☐ Remediation ☐ Groundworks & excavation ☐ Construction ☐ Substructure
☐ Superstructure ☐ Fixtures & fittings ☐ Services ☐ External and site works

Waste management route - is the container being sent for (tick one):

☐ Reuse ☐ Recycling ☐ Recovery (sorting/composting/incineration) ☐ Disposal (landfill)

Is this happening (tick one): ☐ On site ☐ Off site

Is the container segregated? ☐

Enter the weight of waste in tonnes* below:

Bricks (170102)	tonnes	Tiles and Ceramics (170103)	tonnes
Concrete (170101)	tonnes	Inert (1701)	tonnes
Insulation(170604)	tonnes	Metals	tonnes
Packaging (1501)	tonnes	Gypsum (170802)	tonnes
Binder (10)	tonnes	Plastics (170203)	tonnes
Timber (170201)	tonnes	Floor coverings (soft)	tonnes
Electrical and electronic equipment (1602)	tonnes	Furniture (200307)	tonnes
Canteen/office/adhoc (200301)	tonnes	Liquids	tonnes
Oils (1301)	tonnes	Soils (1705)	tonnes
Asphalt and tar (1703)	tonnes	Hazardous Materials	tonnes
Other	tonnes	Mixed (170904) **	tonnes

* 1 tonne = 1000 kg
** Please only use the "Mixed" category if absolutely necessary.

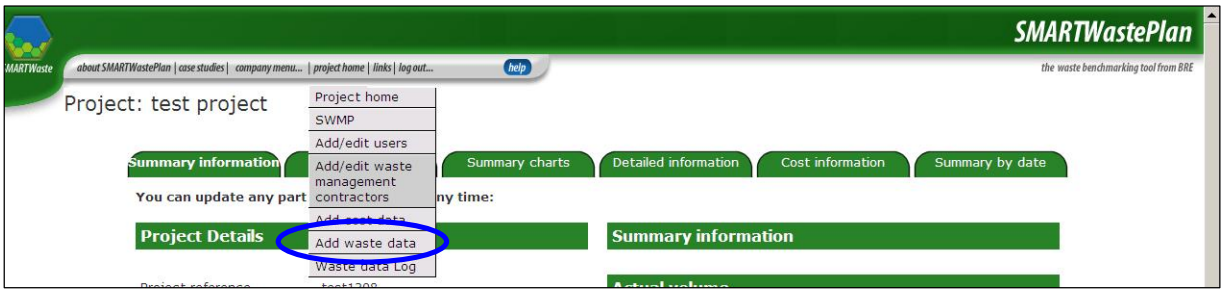
6.1.2. Adding waste data onto your project

Data is entered within each project that you have set up on SMARTWaste Plan. To add waste data:

- Access the relevant project by clicking on the project name on the company homepage
- Click on 'project home' in the grey toolbar at the top of the page and select 'Add waste data' (figure 6.3)
- This will take you to the 'Update' page
- Add the relevant information for each waste container by entering the details and selecting items from the drop down lists (figure 6.4a for volume data, figure 6.4b for tonnes data)
- Click the 'Add' button at the bottom of the page to save the information

  Please note: only click the 'Add' button once otherwise you may duplicate the saving of your entry. All of the waste information within your project and company pages is automatically updated with the new data entered.
- Once the data has been saved a blank 'Update' page will appear so that you can continue adding other paper logs into the system.

Figure 6.3: Project 'Add waste data' button



If the container type you want to use is not listed please contact the SMARTWaste Team to arrange for the new container size to be added to the drop down list.

You can make sure you have entered the information correctly by checking the log of containers leaving site for the particular project (see Section 6.2.1).

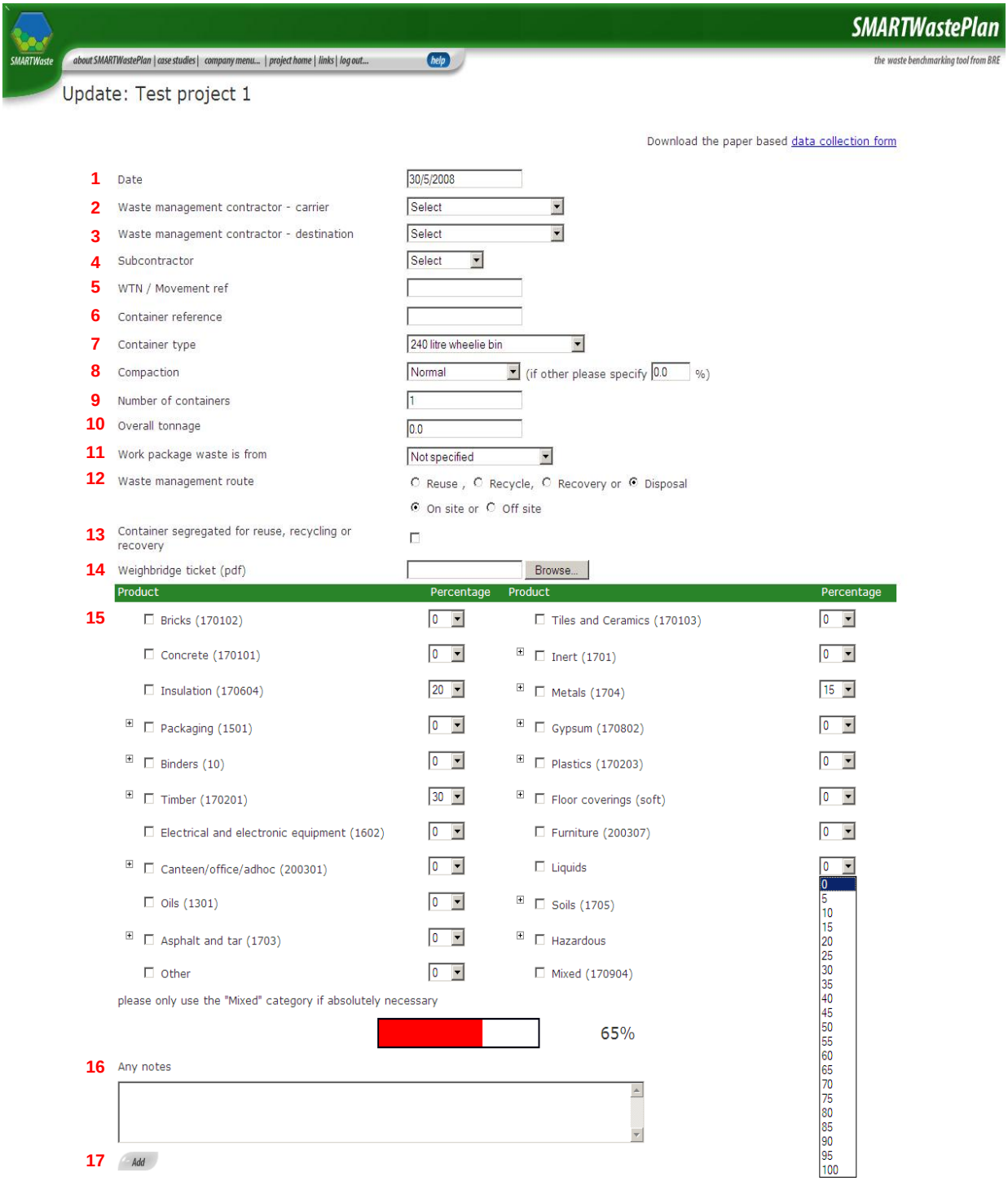
If you realise that waste information has been entered incorrectly, please ask your company admin user to amend the data for you (see section 6.2.2).

Add waste data in volume

If you are entering data as volumes, you will need to enter the percentages for the product groups. The bar at the bottom of the page will total up how much has been entered for that container. The total cannot exceed 100%, however, it may be less than 100% as sometimes partially full containers are removed from site.

See figure 6.4a and the numbered key for an explanation of what should be recorded.

Figure 6.4a: Add waste data in volume


SMARTWastePlan
about SMARTWastePlan | case studies | company menu... | project home | links | log out... help
the waste benchmarking tool from BRE
Update: Test project 1
Download the paper based data collection form
1 Date 30/5/2008
2 Waste management contractor - carrier Select
3 Waste management contractor - destination Select
4 Subcontractor Select
5 WTN / Movement ref
6 Container reference
7 Container type 240 litre wheelie bin
8 Compaction Normal (if other please specify 0.0 %)
9 Number of containers 1
10 Overall tonnage 0.0
11 Work package waste is from Not specified
12 Waste management route Reuse , Recycle, Recovery or Disposal
On site or Off site
13 Container segregated for reuse, recycling or recovery
14 Weighbridge ticket (pdf) Browse...
15
Product Percentage Product Percentage
Bricks (170102) 0 Tiles and Ceramics (170103) 0
Concrete (170101) 0 Inert (1701) 0
Insulation (170604) 20 Metals (1704) 15
Packaging (1501) 0 Gypsum (170802) 0
Binders (10) 0 Plastics (170203) 0
Timber (170201) 30 Floor coverings (soft) 0
Electrical and electronic equipment (1602) 0 Furniture (200307) 0
Canteen/office/adhoc (200301) 0 Liquids 0
Oils (1301) 0 Soils (1705) 0
Asphalt and tar (1703) 0 Hazardous 0
Other 0 Mixed (170904) 0
please only use the "Mixed" category if absolutely necessary
65%
16 Any notes
17 Add
0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

1. Enter the date container left site (in format dd/mm/yyyy, e.g. 19/03/2008).
2. Select the waste carrier removing this waste*
3. Select the waste site (destination) that the waste is going to*
4. *Optional:* Select the subcontractor creating the waste*
   *if none appear, you will need to add them; see sections 2.7 and 4.3.
5. Enter the waste transfer note (WTN) number (skip ticket number).
6. *Optional:* Enter a container reference.

7. Choose the container type from the drop down list
   – if it is not listed, contact the SMARTWaste team to get it included.

8. Select level of compaction of the container contents
   – this will nearly always be normal, unless you are using a compactor onsite. Table 6.3 shows the void space associated with compaction levels.

Table 6.3: Void percentage for the different types of compaction

Compaction	Description	Assumed Void Percent
Normal	Uncompacted waste	40
Slightly compacted	Crushed with a forklift or heavy object	25
Machine compactor	Waste compacted with a dedicated compactor	5
Other	If necessary enter your own void space figure	specify

9. If more than one container with the same contents is leaving site, enter the number of containers.

10. *Optional:* Enter the overall tonnage of the container
    – you can get this information from the waste transfer note.

11. *Optional:* Select the work package that the waste is coming from.

12. Tick one of the boxes to select the waste management route. Also select where this is happening (either on site or off site).

    - Reuse = reuse the material without further processing e.g. brick as a brick
    - Recycle = reuse the material with further processing e.g. crushing concrete to create aggregate
    - Recovery = treat the waste either by:
        - sorting mixed waste at a waste transfer station,
        - composting waste, or
        - incinerating waste
    - Disposal = send the waste to landfill (or other disposal) directly

13. Tick box if the container is segregated (i.e. one type of material). If the container is mixed, leave this box blank.

14. Upload a scanned image of the WTN/weighbridge ticket for the container by clicking the 'Browse' button. **IMPORTANT**: **Do not type** any other text in this box; otherwise, the tool will not allow you to save the waste entry.

15. Select the percentages of each product group within the container. Some categories also have optional sub-categories (use the + next to product name).
    – the red bar along the bottom will add up the contents, telling you when you have reached 100%.

16. Add notes at the bottom if you have any comments.

17. Click the 'Add' button
    – this will add the data to your bank of information and bring up a new sheet for you to add the next entry. Please only click the add button once, otherwise your entry will be duplicated.

Repeat this process if you have more entries to add.

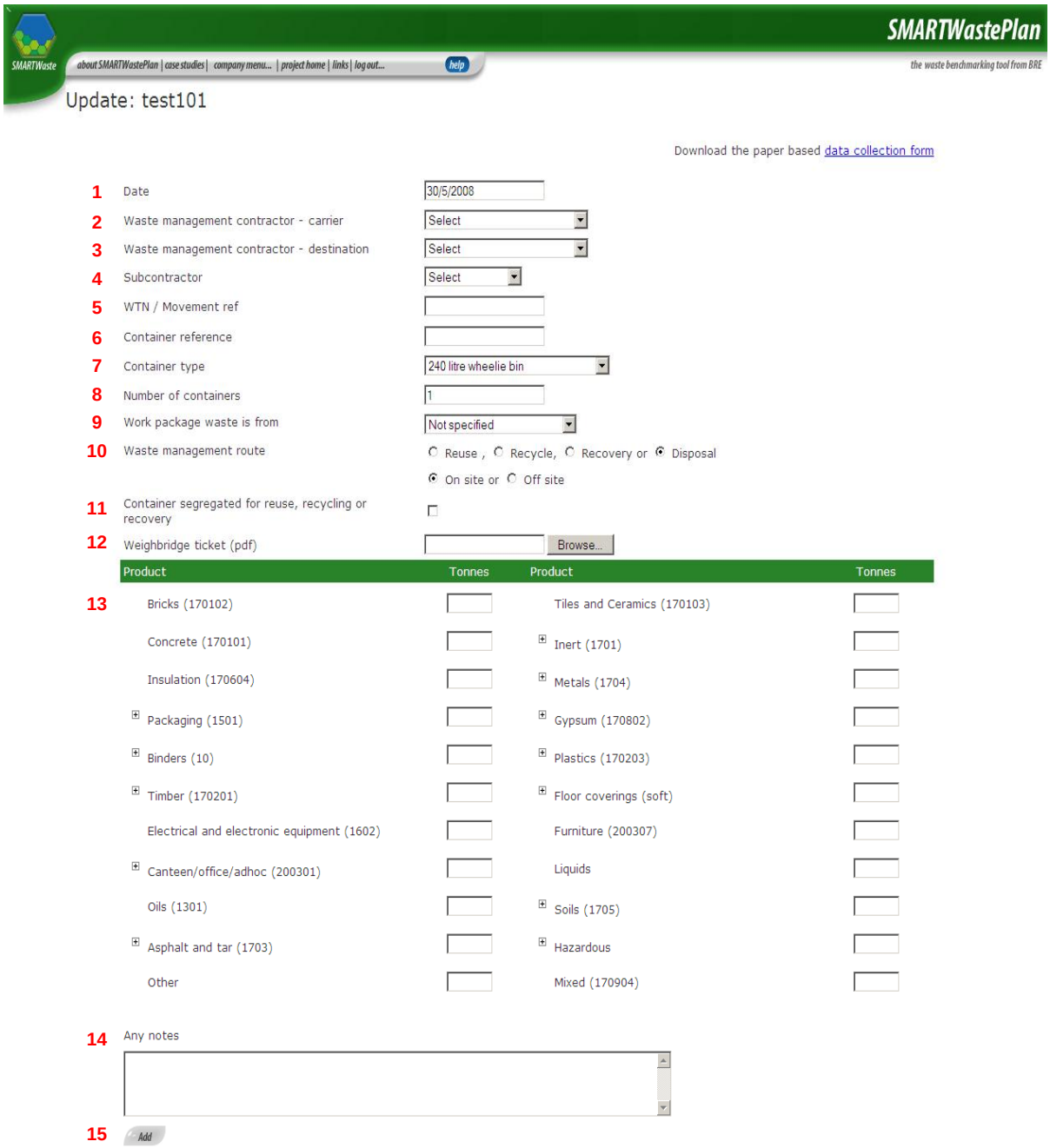
Add waste data in tonnes

If you are entering data as tonnage, you will need to enter the relevant weight next to the product groups.

Please note that some waste management contractors may be able to give you the tonnes for each waste material leaving your site, but this is likely to be less detailed than the volume based data. For the Code for Sustainable Homes you have to report by waste types (e.g. timber, packaging, insulation) so if you measure in tonnes you will need to ensure that you can obtain this information from your waste management contractors.

See figure 6.4b and the numbered key for an explanation of what should be recorded.

Figure 6.4b: Add waste data in tonnes



1. Enter the date container left site (in format dd/mm/yyyy, e.g. 19/03/2008).
2. Select the waste carrier removing this waste*
3. Select the waste site (destination) that the waste is going to*
4. Optional: Select the subcontractor creating the waste*
   *if none appear, you will need to add them; see sections 2.7 and 4.3.
5. Enter the waste transfer note (WTN) number (skip ticket number).
6. Optional: Enter a container reference.
7. Choose the container type from the drop down list
   – if it is not listed, contact the SMARTWaste team to get it included.
8. If more than one container with the same contents is leaving site, enter the number of containers.
9. Optional: Select the work package that the waste is coming from.
10. Tick one of the boxes to select the waste management route. Also select where this is happening (either on site or off site).
    - Reuse = reuse the material without further processing e.g. brick as a brick
    - Recycle = reuse the material with further processing e.g. crushing concrete to create aggregate
    - Recovery = treat the waste either by:
      - sorting mixed waste at a waste transfer station,
      - composting waste, or
      - incinerating waste
    - Disposal = send the waste to landfill (or other disposal) directly
11. Tick this box if the container is segregated (i.e. one type of material). If the container is mixed, leave this box blank.
12. Upload a scanned image of the WTN/weighbridge ticket for the container by clicking the 'Browse' button. **IMPORTANT**: **Do not type** any other text in this box; otherwise, the tool will not allow you to save the waste entry.
13. Add the tonnes of each product group within the container(s).
14. Add notes at the bottom if you have any comments.
15. Click the 'Add' button
    – this will add the data to your bank of information and bring up a new sheet for you to add the next entry. Please only click the add button once, otherwise your entry will be duplicated.

Repeat this process if you have more entries to add.

6.2. Viewing and amending waste data entered

The waste data you enter can be viewed in a number of different ways including through the:

- waste data log
- project summary information, summary chart, detailed information, cost data and summary by date tabs
- company summary information, summary chart, detailed information, cost data and summary by date tabs

In addition, any incorrect waste data can be amended by the company admin users only via the waste data log. Users at access permission levels lower than company admin users (such as project admin users and project users) have no access rights to amend waste data, they have to ask their company admin users to do this for them (see section 6.2.2).

6.2.1. Viewing Waste Data Log

To view a log record of all the containers that have left the project site to date:

- Click on the 'project menu' on the toolbar at the top of a Project's Homepage
- Select 'Waste data log' (figure 6.5)
- This will take you to the log record of all the containers that have left this site to date(figure 6.6)
- To filter the information in the log, make your selection of what you want to filter by:
    - a date range
    - a waste carrier
    - a waste destination
    - a subcontractor (if entered)
    - a work package
    - a particular container size
    - a segregated container or not
    - a management route
    - an individual product group
- then click on the 'update' button (see figure 6.6).

Figure 6.5: Project 'Waste data log'

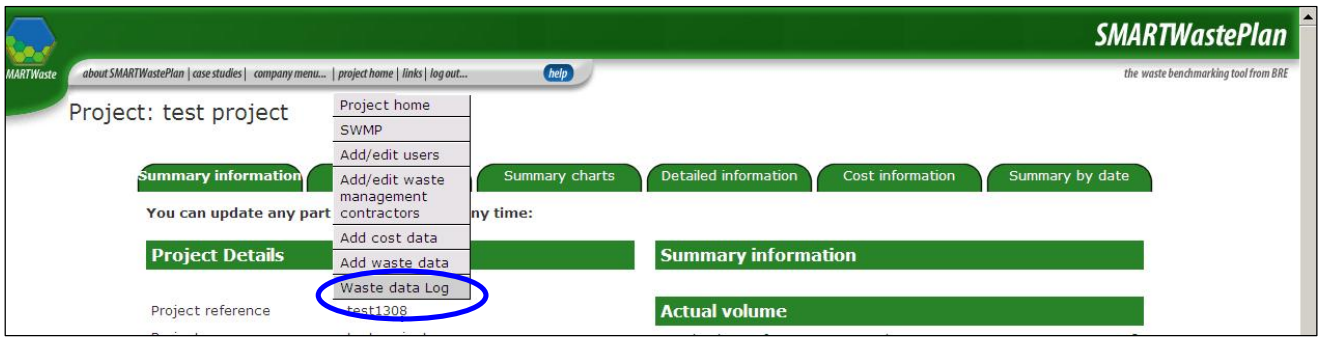
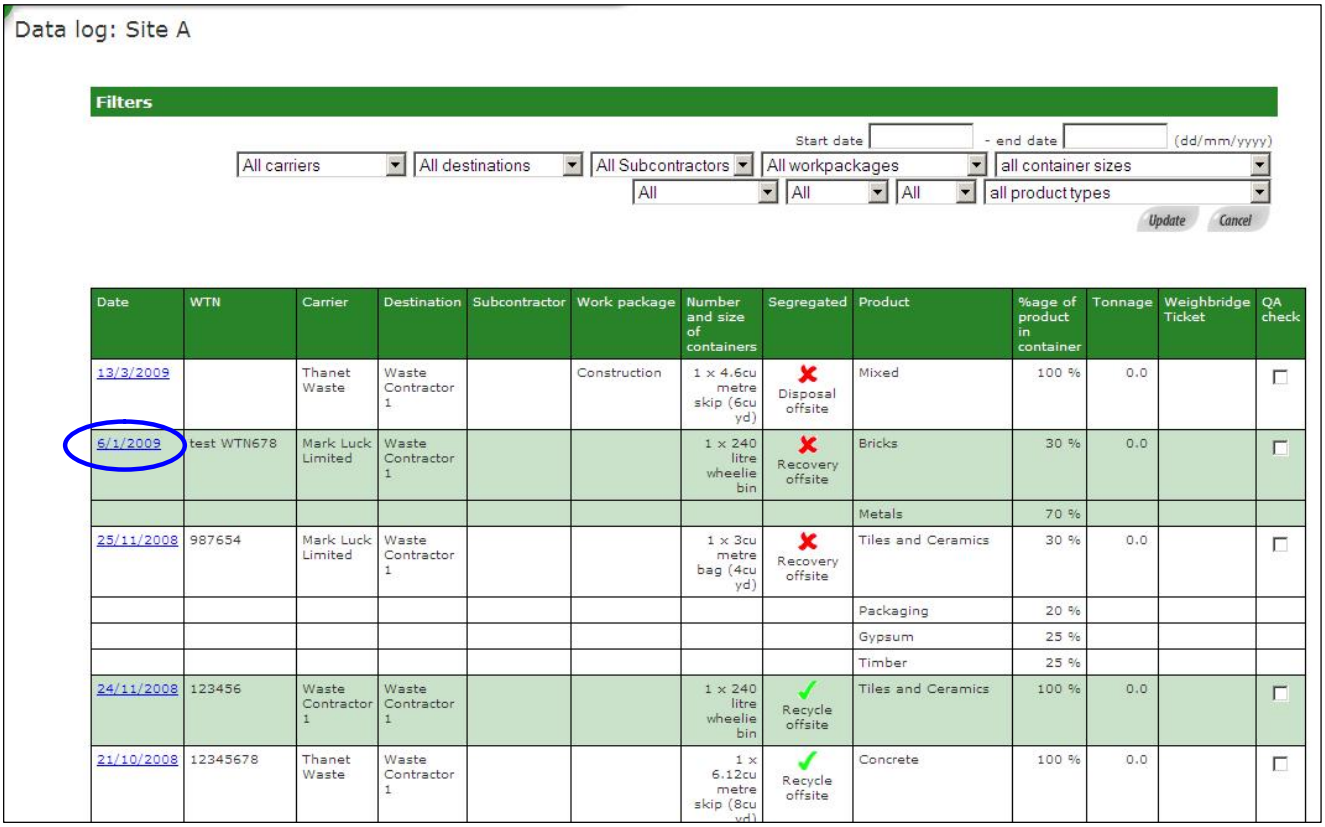


Figure 6.6: Filtering on the container log page



Date	WTN	Carrier	Destination	Subcontractor	Work package	Number and size of containers	Segregated	Product	%age of product in container	Tonnage	Weighbridge Ticket	QA check
13/3/2009		Thanet Waste	Waste Contractor 1		Construction	1 x 4.6cu metre skip (6cu yd)	✘ Disposal offsite	Mixed	100 %	0.0		☐
6/1/2009	test WTN678	Mark Luck Limited	Waste Contractor 1			1 x 240 litre wheelie bin	✘ Recovery offsite	Bricks	30 %	0.0		☐
								Metals	70 %			
25/11/2008	987654	Mark Luck Limited	Waste Contractor 1			1 x 3cu metre bag (4cu yd)	✘ Recovery offsite	Tiles and Ceramics	30 %	0.0		☐
								Packaging	20 %			
								Gypsum	25 %			
								Timber	25 %			
24/11/2008	123456	Waste Contractor 1	Waste Contractor 1			1 x 240 litre wheelie bin	✓ Recycle offsite	Tiles and Ceramics	100 %	0.0		☐
21/10/2008	12345678	Thanet Waste	Waste Contractor 1			1 x 6.12cu metre skip (8cu yd)	✓ Recycle offsite	Concrete	100 %	0.0		☐

If the material was segregated for reuse, recycling or recovery this is shown by a green tick 4 or a red cross 6 if it was not segregated.

QA check stands for Quality Assurance check – you can tick this box if you have checked that the information is correct.

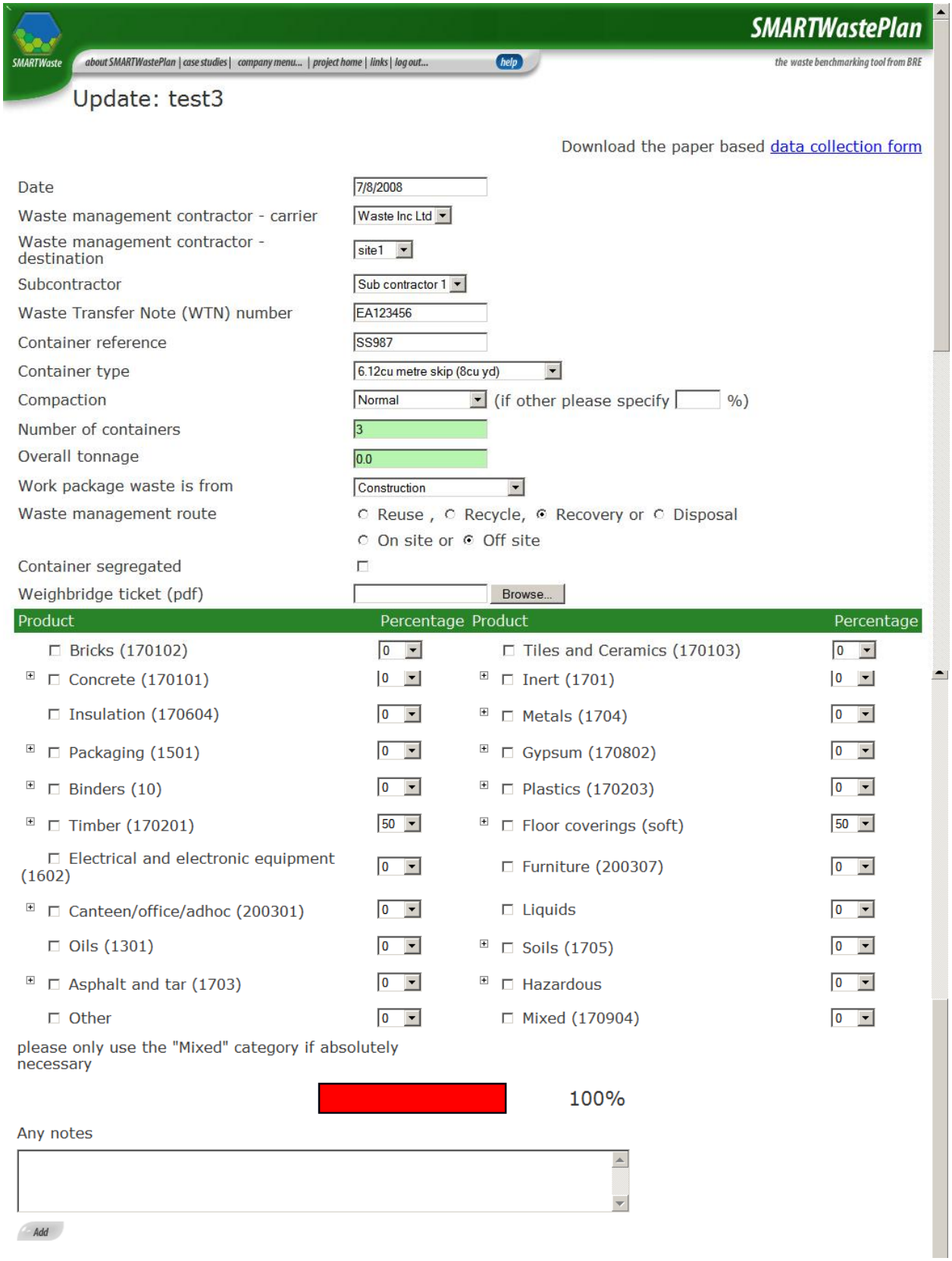
6.2.2. Amending incorrect waste data on 'Waste Data Log' page

If you realise that waste information has been entered incorrectly, please ask your company admin user to amend the data for you. Users with access permission levels lower than company admin users (such as project admin users and project users) have no access rights to amend waste data.

To amend waste data:

- o Please note: you must be logged in with a username and password that is set up at the company admin permission level otherwise you will not be able to amend data.
- o For each waste entry, the date of the entry is shown as a hyperlink.
- o To amend waste data, click on the appropriate date hyperlink (see figure 6.6).
- o A new form called 'Update: followed by the project name' will open which looks the same as the 'add waste data' page you originally filled in (figure 6.7).
- o Here you can amend the waste data by changing the details as required.
- o When you have finished amending data, click the 'Add' button at the bottom of the page.
- o This will save your data and return you back to the waste data log page, so that you can review the changes and continue.

Figure 6.7: Project 'Amending waste data'



6.3. Project ‘Summary information’

The Project ‘Summary Information’ tab highlights waste information for the project by summarising:

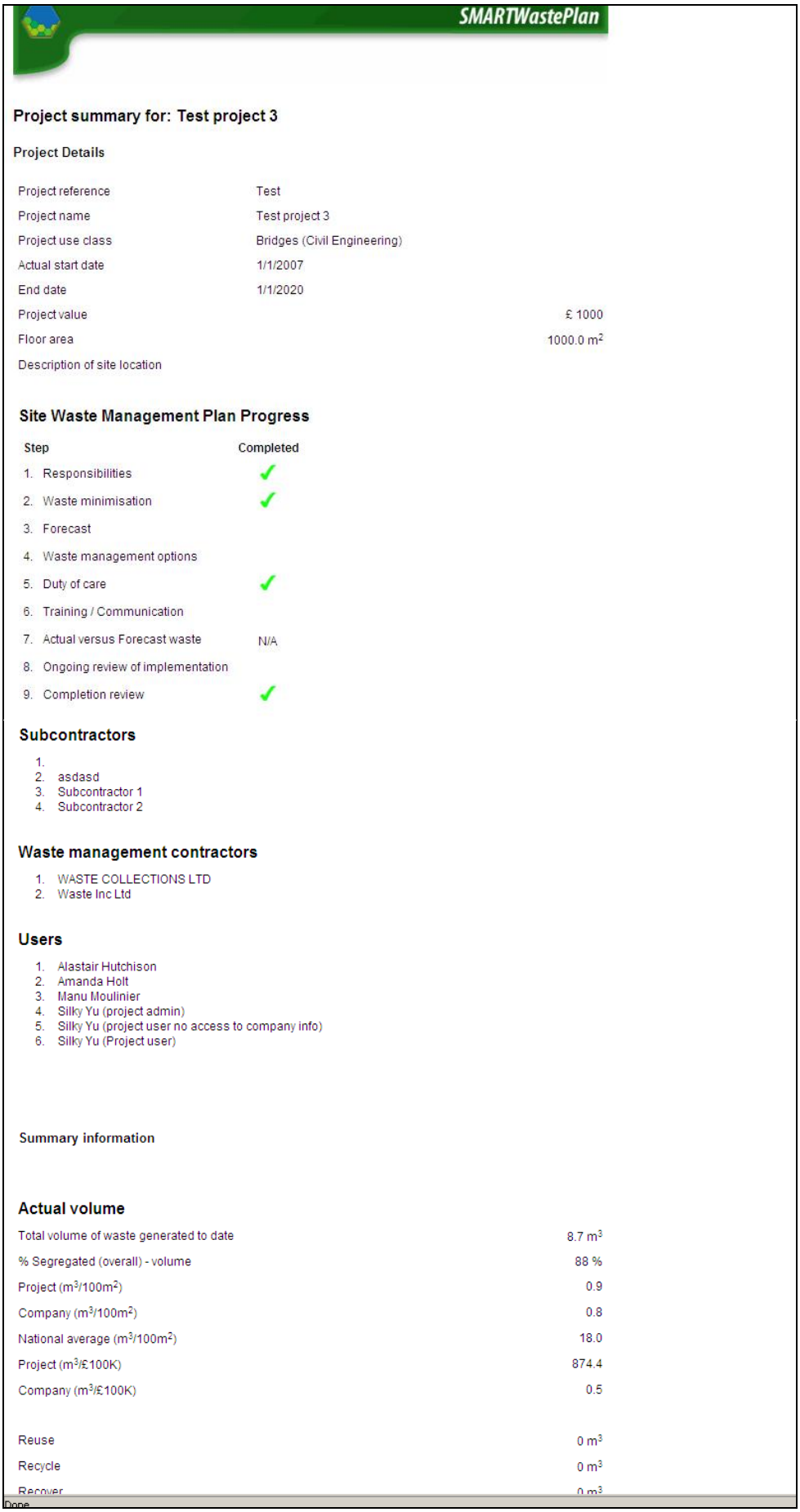
- For volume based waste data
  - actual volume of waste
  - bulk volume of waste
  - amounts of waste reused, recycled, recovered or disposed
  - tonnage of waste (if entered)
  - cost KPIs

- For tonnes based waste data
  - actual tonnage of waste
  - amounts of waste reused, recycled, recovered or disposed
  - cost KPIs

Click on the ‘Printer friendly’ button at the bottom of the page to get a report which amalgamates all the information from the Project ‘Summary Information’, ‘Summary Charts’, ‘Detailed information’, ‘Cost information’ and ‘Summary by date’ tabs into one page (figure 6.8).

This can then be printed in the usual way, by going to ‘File’ on the toolbar and selecting ‘Print.’ It can also be saved as an html file [Webpage, complete (*.htm, *.html)] which can then be opened in Microsoft Word and be edited so that you can tailor your report with text as necessary.

Figure 6.8: 'Printer friendly' summary report for a project



SMARTWastePlan

Project summary for: Test project 3

Project Details

Project reference	Test	
Project name	Test project 3	
Project use class	Bridges (Civil Engineering)	
Actual start date	1/1/2007	
End date	1/1/2020	
Project value		£ 1000
Floor area		1000.0 m^2
Description of site location		

Site Waste Management Plan Progress

Step	Completed
1. Responsibilities	✓
2. Waste minimisation	✓
3. Forecast	
4. Waste management options	
5. Duty of care	✓
6. Training / Communication	
7. Actual versus Forecast waste	N/A
8. Ongoing review of implementation	
9. Completion review	✓

Subcontractors

1.
2. asdasd
3. Subcontractor 1
4. Subcontractor 2

Waste management contractors

1. WASTE COLLECTIONS LTD
2. Waste Inc Ltd

Users

1. Alastair Hutchison
2. Amanda Holt
3. Manu Moulinier
4. Silky Yu (project admin)
5. Silky Yu (project user no access to company info)
6. Silky Yu (Project user)

Summary information

Actual volume

Total volume of waste generated to date	8.7 m^3
% Segregated (overall) - volume	88 %
Project (m^3/100m^2)	0.9
Company (m^3/100m^2)	0.8
National average (m^3/100m^2)	18.0
Project (m^3/£100K)	874.4
Company (m^3/£100K)	0.5
Reuse	0 m^3
Recycle	0 m^3
Recover	0 m^3

Done

6.4. Project 'Summary charts'

This tab shows two waste data charts for the project, either in volume (figure 6.9a) or tonnes (figure 6.9b) depending on how you set up your project:

- 'Waste to date by product group' chart
  - Cumulative waste entered to date for each of the 22 product groups

- 'Waste over time' chart
  - Track of cumulative waste data over the timeline of the project
  - Week 0 is the first week data was entered for

The graphs automatically update as new waste data is entered into the system.

Please note: If you are entering volume based waste data, the quantities shown are actual material volume i.e. with void space removed from the container based on the compaction levels you have selected. This allows you to see a clear picture of the project's waste.

Figure 6.9a: Project: 'Summary Chart' tab (example in volume)

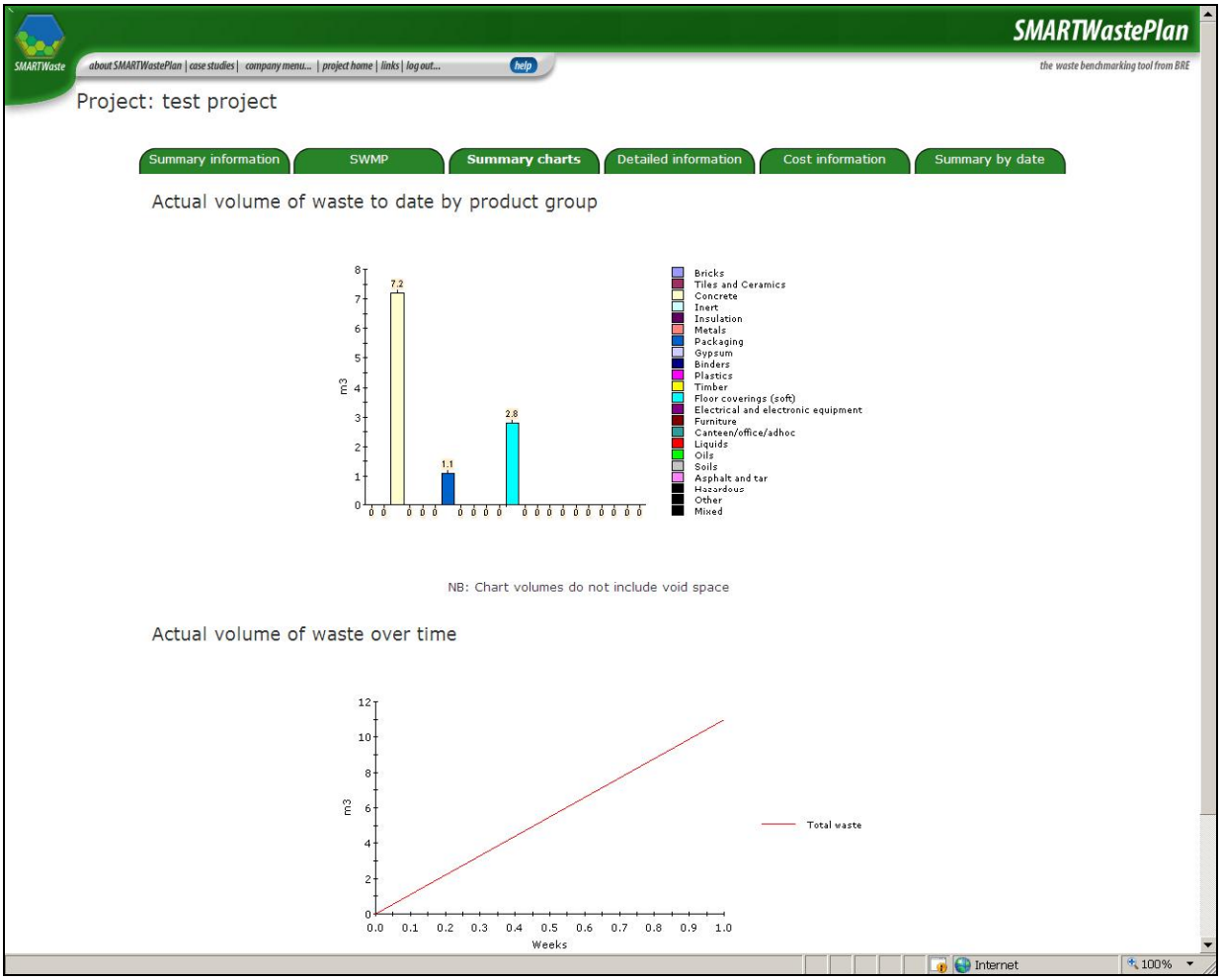
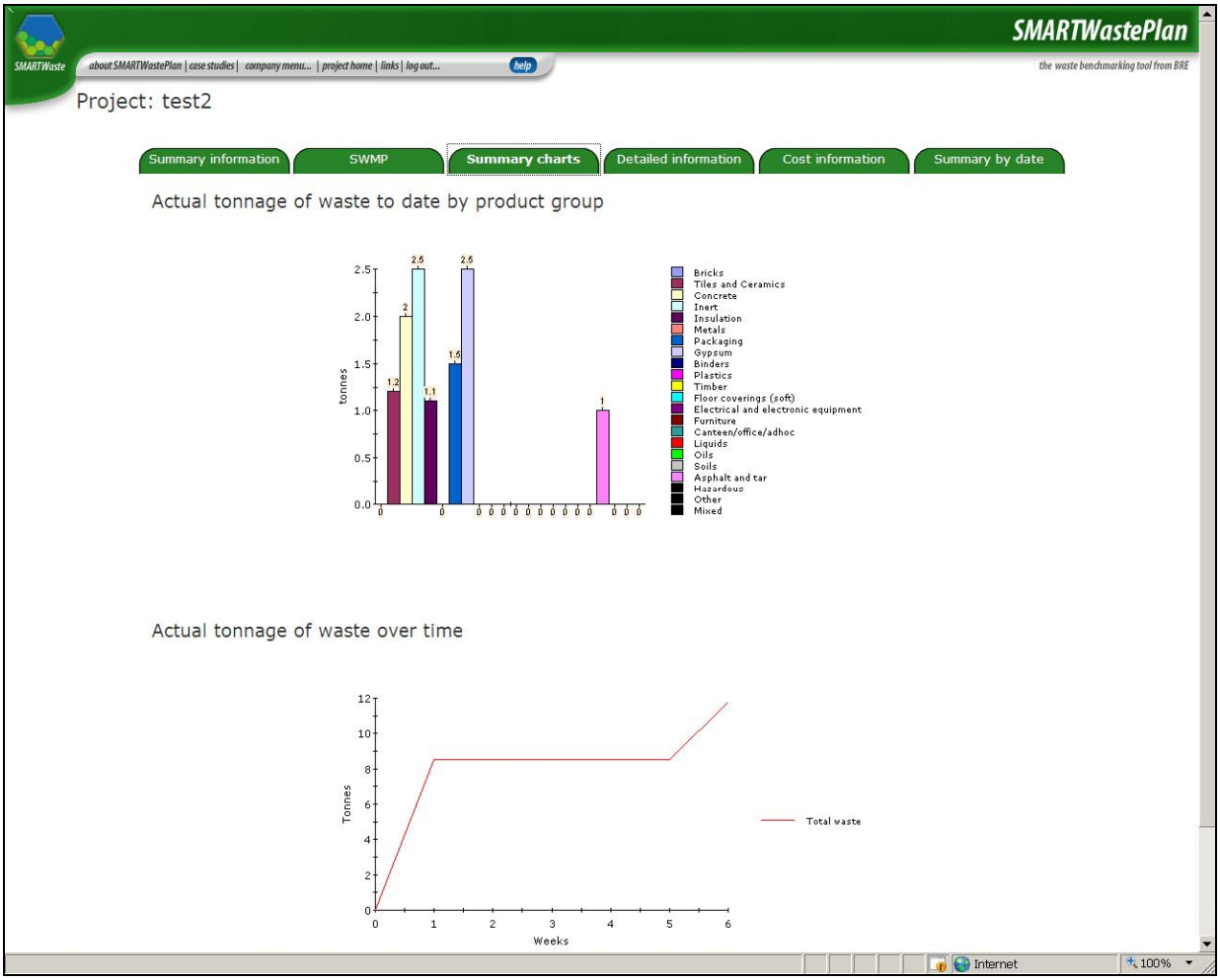


Figure 6.9b: Project: 'Summary Chart' tab (example in tonnes)



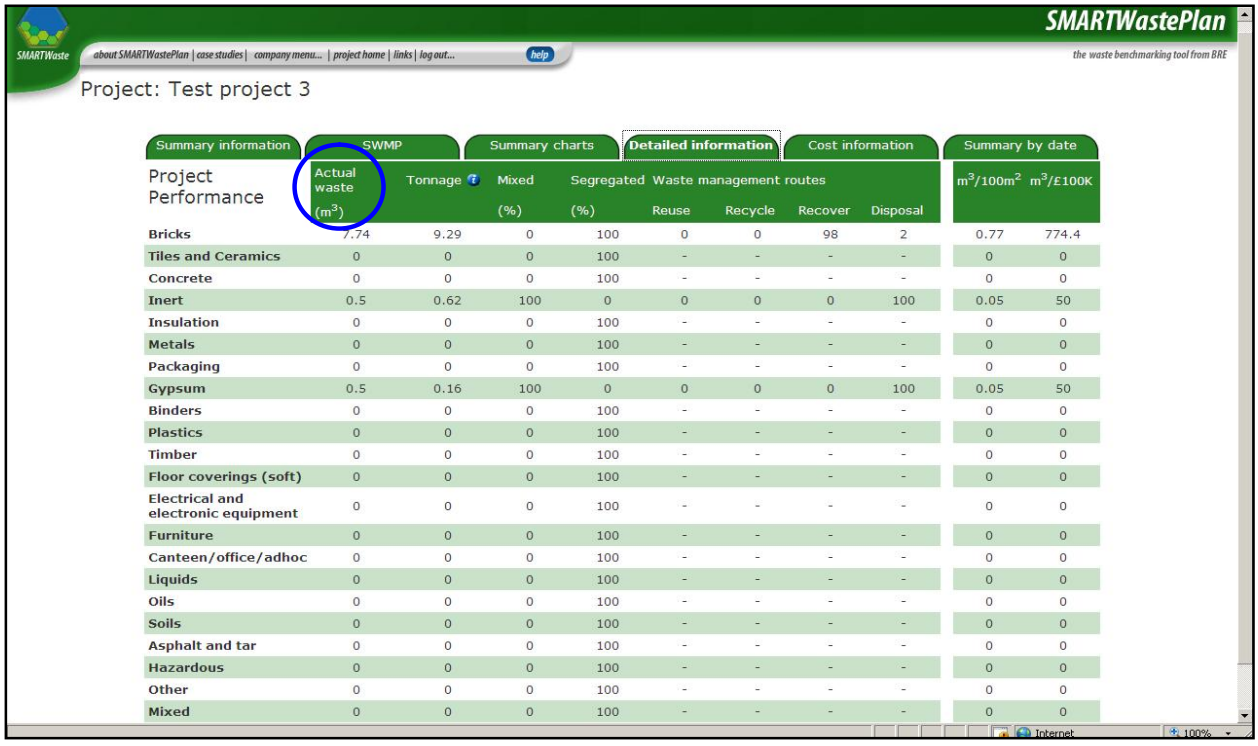
6.5. Project 'Detailed information'

The 'Detailed information' tab shows the overall performance for the project in detail for each of the 22 product groups. Table 6.4 summarises the information displayed depending on whether you are collecting waste data as volume or tonnes. Also see figure 6.10a (volume) or figure 6.10b (tonnes).

Table 6.4: Information displayed on project 'Detailed information' tab

Waste data displayed	Volume based projects	Tonnage based projects
Total actual waste	√ Volume of waste in m^3	√ Weight of waste in tonnes
Estimated tonnage *(estimate based on a conversion factor which translates the volume into approximate tonnes[4])*	√	x
the percentage of all waste that is mixed waste	√	√
the percentage of all waste that is segregated waste	√	√
the percentage of waste that has been sent for reuse/recycling/ recovery/disposal	√	√
performance indicators for each of the 22 product groups	√ m^3 waste / 100m^2 of floor area and m^3 of waste / £100,000 project cost	√ tonnes of waste / 100m^2 of floor area and tonnes of waste / £100,000 project cost

Figure 6.10a: Project 'Detailed Information' tab (entering data as volume)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Project: Test project 3
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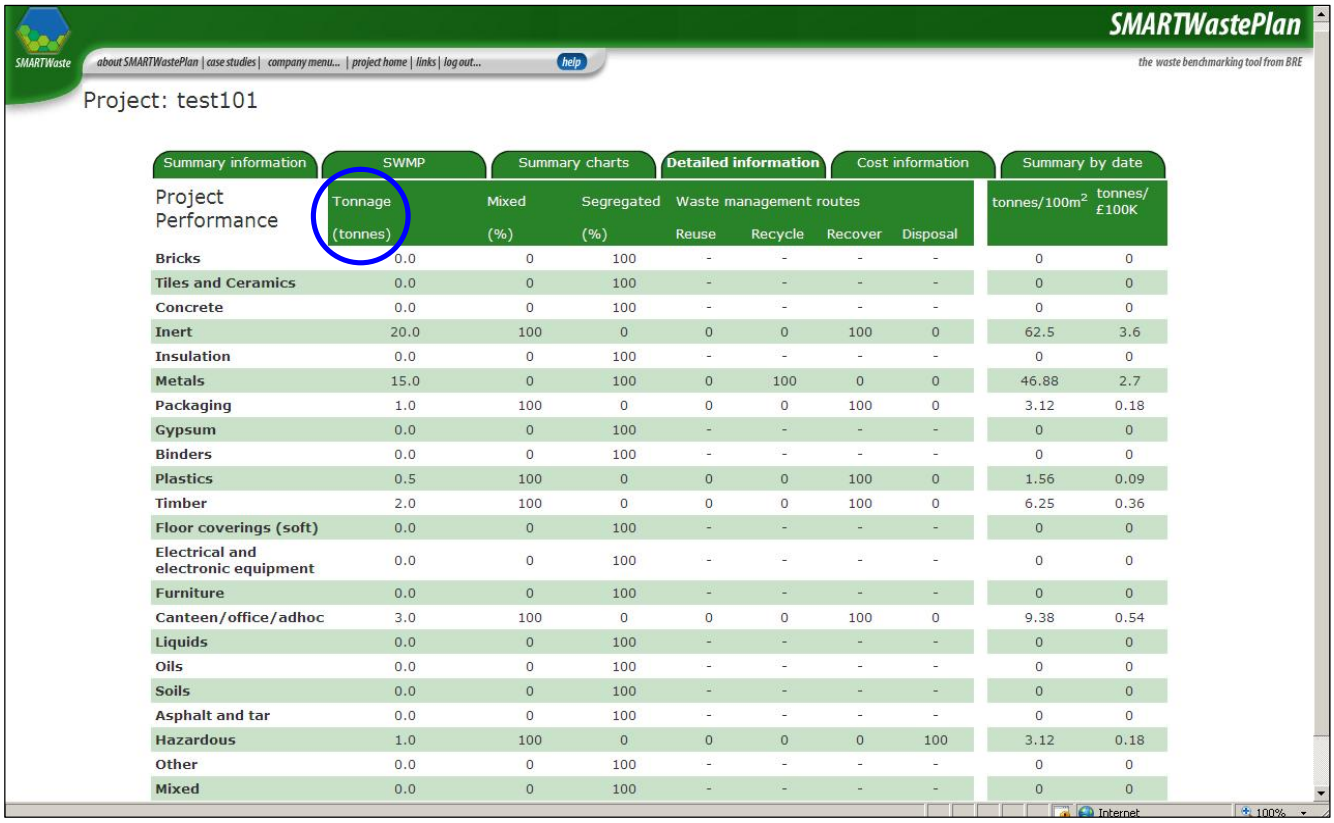
SWMP
Summary charts
Detailed information
Cost information
Summary by date
Project Performance
Actual waste (m3)
Tonnage
Mixed (%)
Segregated (%)
Waste management routes
Reuse
Recycle
Recover
Disposal
m3/100m2
m3/£100K
Bricks 7.74 9.29 0 100 0 0 98 2 0.77 774.4
Tiles and Ceramics 0 0 0 100 - - - - 0 0
Concrete 0 0 0 100 - - - - 0 0
Inert 0.5 0.62 100 0 0 0 0 100 0.05 50
Insulation 0 0 0 100 - - - - 0 0
Metals 0 0 0 100 - - - - 0 0
Packaging 0 0 0 100 - - - - 0 0
Gypsum 0.5 0.16 100 0 0 0 0 100 0.05 50
Binders 0 0 0 100 - - - - 0 0
Plastics 0 0 0 100 - - - - 0 0
Timber 0 0 0 100 - - - - 0 0
Floor coverings (soft) 0 0 0 100 - - - - 0 0
Electrical and electronic equipment 0 0 0 100 - - - - 0 0
Furniture 0 0 0 100 - - - - 0 0
Canteen/office/adhoc 0 0 0 100 - - - - 0 0
Liquids 0 0 0 100 - - - - 0 0
Oils 0 0 0 100 - - - - 0 0
Soils 0 0 0 100 - - - - 0 0
Asphalt and tar 0 0 0 100 - - - - 0 0
Hazardous 0 0 0 100 - - - - 0 0
Other 0 0 0 100 - - - - 0 0
Mixed 0 0 0 100 - - - - 0 0
Internet
100%

[4] The conversion factors used on SMARTWaste Plan have been taken from the Environment Agency Wales report on the key findings of their Construction and Demolition waste survey http://www.environment-agency.gov.uk/regions/wales/816243/1985904/

Figure 6.10b: Project 'Detailed Information' tab (entering data as tonnes)



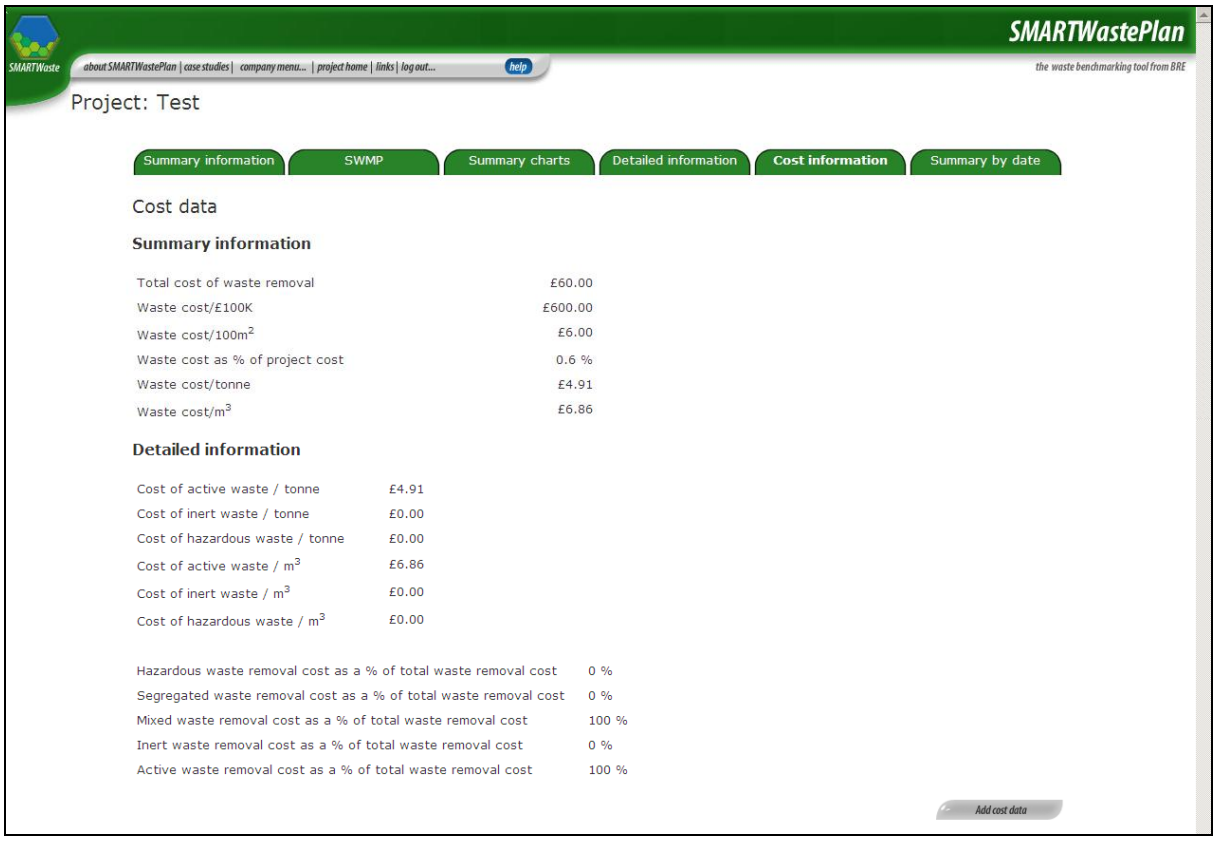
Project Performance	Tonnage (tonnes)	Mixed (%)	Segregated (%)	Waste management routes				tonnes/100m²	tonnes/ £100K
				Reuse	Recycle	Recover	Disposal		
Bricks	0.0	0	100	-	-	-	-	0	0
Tiles and Ceramics	0.0	0	100	-	-	-	-	0	0
Concrete	0.0	0	100	-	-	-	-	0	0
Inert	20.0	100	0	0	0	100	0	62.5	3.6
Insulation	0.0	0	100	-	-	-	-	0	0
Metals	15.0	0	100	0	100	0	0	46.88	2.7
Packaging	1.0	100	0	0	0	100	0	3.12	0.18
Gypsum	0.0	0	100	-	-	-	-	0	0
Binders	0.0	0	100	-	-	-	-	0	0
Plastics	0.5	100	0	0	0	100	0	1.56	0.09
Timber	2.0	100	0	0	0	100	0	6.25	0.36
Floor coverings (soft)	0.0	0	100	-	-	-	-	0	0
Electrical and electronic equipment	0.0	0	100	-	-	-	-	0	0
Furniture	0.0	0	100	-	-	-	-	0	0
Canteen/office/adhoc	3.0	100	0	0	0	100	0	9.38	0.54
Liquids	0.0	0	100	-	-	-	-	0	0
Oils	0.0	0	100	-	-	-	-	0	0
Soils	0.0	0	100	-	-	-	-	0	0
Asphalt and tar	0.0	0	100	-	-	-	-	0	0
Hazardous	1.0	100	0	0	0	0	100	3.12	0.18
Other	0.0	0	100	-	-	-	-	0	0
Mixed	0.0	0	100	-	-	-	-	0	0

6.6. Project 'Cost Information'

The 'Cost information' tab shows a summary of the waste cost data in either volume (figure 6.11a) or tonnes (figure 6.11b), including:

- the total cost of waste removal
- waste cost per:
  - £100,000 of project value
  - 100m^2 of floor area
  - as % of project cost
  - per tonne or m^3 of waste
  - by waste type

Figure 6.11a: Project 'Cost Information' tab (in volume)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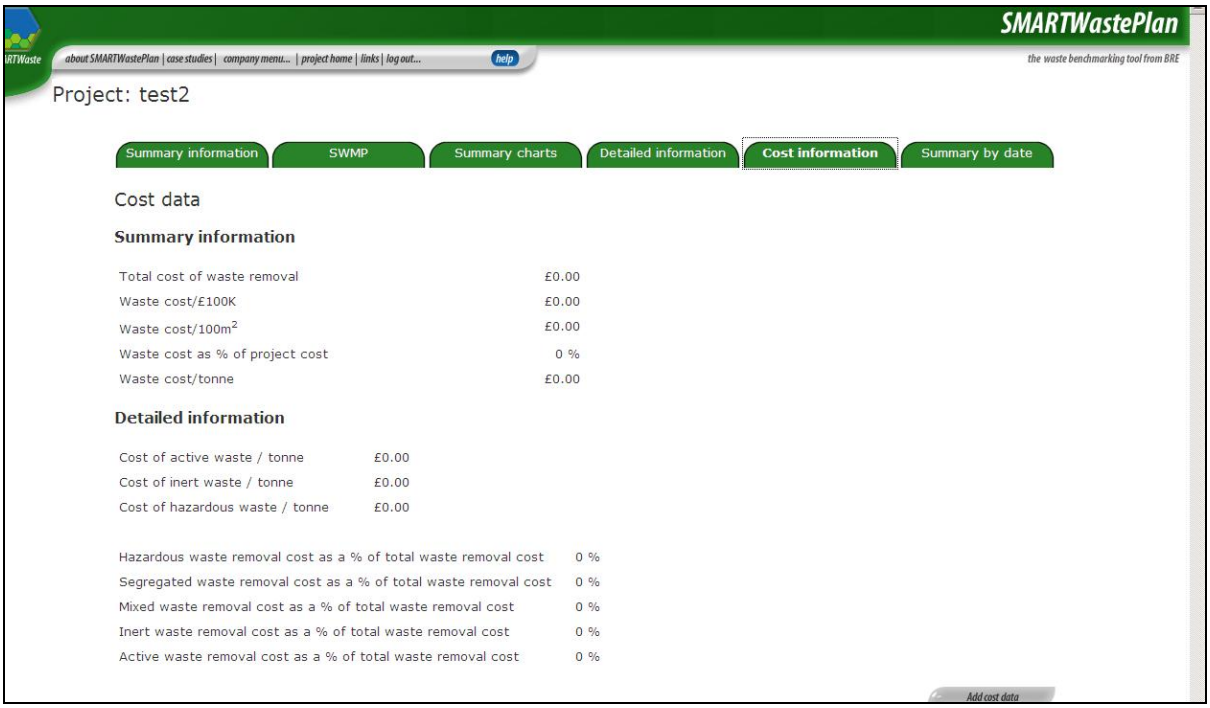
Cost data
Summary information
Total cost of waste removal £60.00
Waste cost/£100K £600.00
Waste cost/100m2 £6.00
Waste cost as % of project cost 0.6 %
Waste cost/tonne £4.91
Waste cost/m3 £6.86
Detailed information
Cost of active waste / tonne £4.91
Cost of inert waste / tonne £0.00
Cost of hazardous waste / tonne £0.00
Cost of active waste / m3 £6.86
Cost of inert waste / m3 £0.00
Cost of hazardous waste / m3 £0.00
Hazardous waste removal cost as a % of total waste removal cost 0 %
Segregated waste removal cost as a % of total waste removal cost 0 %
Mixed waste removal cost as a % of total waste removal cost 100 %
Inert waste removal cost as a % of total waste removal cost 0 %
Active waste removal cost as a % of total waste removal cost 100 %
Add cost data

Figure 6.11b: Project 'Cost Information' tab (in tonnes)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the waste benchmarking tool from BRE
Project: test2
Summary information
SWMP
Summary charts
Detailed information
Cost information
Summary by date
Cost data
Summary information
Total cost of waste removal £0.00
Waste cost/£100K £0.00
Waste cost/100m2 £0.00
Waste cost as % of project cost 0 %
Waste cost/tonne £0.00
Detailed information
Cost of active waste / tonne £0.00
Cost of inert waste / tonne £0.00
Cost of hazardous waste / tonne £0.00
Hazardous waste removal cost as a % of total waste removal cost 0 %
Segregated waste removal cost as a % of total waste removal cost 0 %
Mixed waste removal cost as a % of total waste removal cost 0 %
Inert waste removal cost as a % of total waste removal cost 0 %
Active waste removal cost as a % of total waste removal cost 0 %
Add cost data

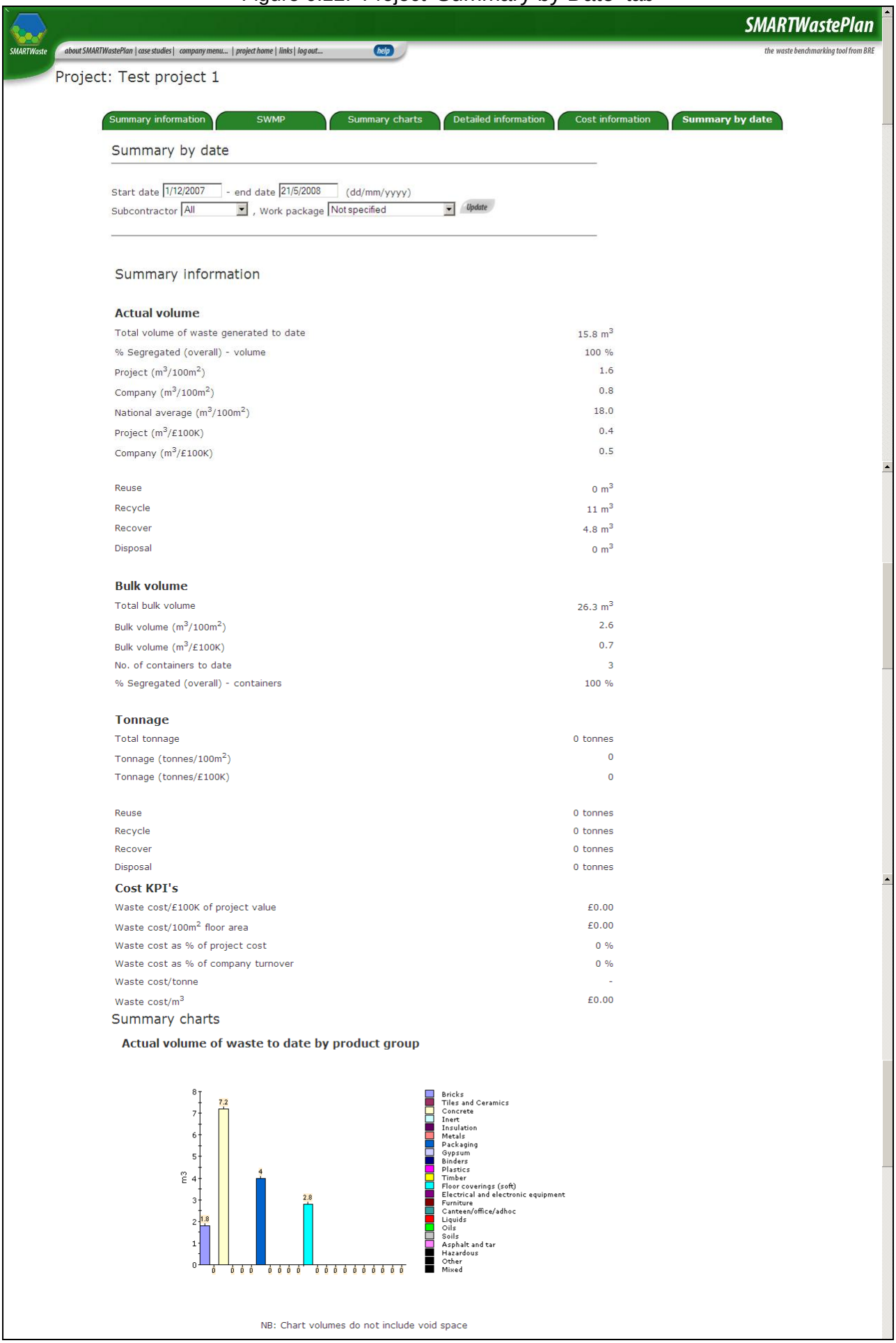
6.7. Project 'Summary by date'

The 'Summary by Date' tab (figure 6.12) shows a report of information filtered by date, subcontractors, and work package.

Just enter a Start Date and End Date for the period you are looking for (e.g. this could be a month, quarter or year), select the details you want to focus on, then click on the 'Update' button.

The tool will then create a summary report of the waste data for the criteria you specified.

Figure 6.12: Project 'Summary by Date' tab



7. Log out

When you have finished your visit to SMARTWaste Plan, please remember to log off your company account, by clicking on 'log out…' on the toolbar at the top of the page you are on (figure 7.1).

Figure 7.1: Log out of SMARTWaste Plan using the toolbar

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the waste benchmarking tool from BRE
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8. Contact us

If you have any queries regarding SMARTWaste Plan, please do not hesitate to contact the SMARTWaste Team on 01923 664851 or 01923 664633 or smartwaste@bre.co.uk.

Please do not e-mail specific contacts at BRE with enquiries or questions about SMARTWaste Plan; it is best to e-mail the dedicated SMARTWaste e-mail address shown above to enable a quick response to your query. The dedicated SMARTWaste e-mail address is checked regularly by the members of the SMARTWaste team who are in the office, whereas if you e-mail to a direct contact they may be out of the office for a few days so will not be able to get back to you as promptly. Thank you for your co-operation with this.

Appendix 1 – Definition of project cost and floor area

- **Project cost** - This is the price agreed by the contractor and the client in the tender. If there is no tender, the cost must include labour, plants, materials, overheads and profit but VAT is excluded as are land costs.

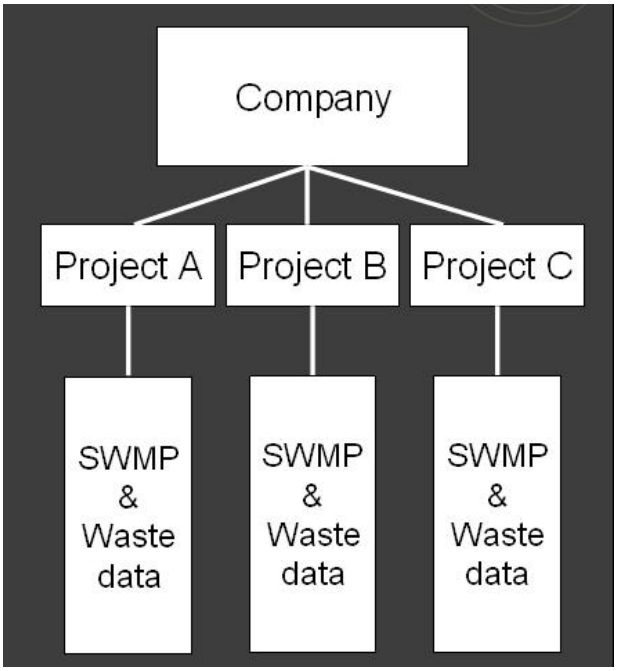
- **Floor area** - This is the gross internal floor area (including walls).

Appendix 2 - SMARTWaste Plan Additional Services

Generic SMARTWaste Plan account structure

SMARTWaste Plan is BRE's free Site Waste Management Plan (SWMP) and waste measurement tool. Each company using SMARTWaste Plan registers to set up a company account. Within the company account, projects are created for which a Site Waste Management Plan can then be written and waste arisings data be recorded.

Diagram showing generic account structure



Additional Levels – Group and Client levels

There are a couple of additional levels which you can purchase to make managing accounts and projects easier:

Level	Who is it suitable for	Description	One-off fee
Group Level	For companies who have a number of business units, regional offices or divisions	A group level account is created under which an account is set up for each business unit. Each business unit account has its own username and password access. This is separate from the group and enables viewing of that business unit's details only. The username and password access of the group level enables viewing of data for the group as a whole, by business unit and by individual project, all from one location.	£1500 +VAT
Client Level	For clients who have a number of contractors who are using SMARTWaste Plan	Each contractor has their own account on SMARTWaste Plan where they store all projects they are working on (for all of their clients). The contractor then links their project to a client using a password provided by the client. The client has their own account where they can view all their projects linked by their contractors. The client sets up a password that is given to contractors to set up the link. The client can then view all their project data from one location, sorted by contractor then project.	£3000 +VAT

Diagram showing group level account structure

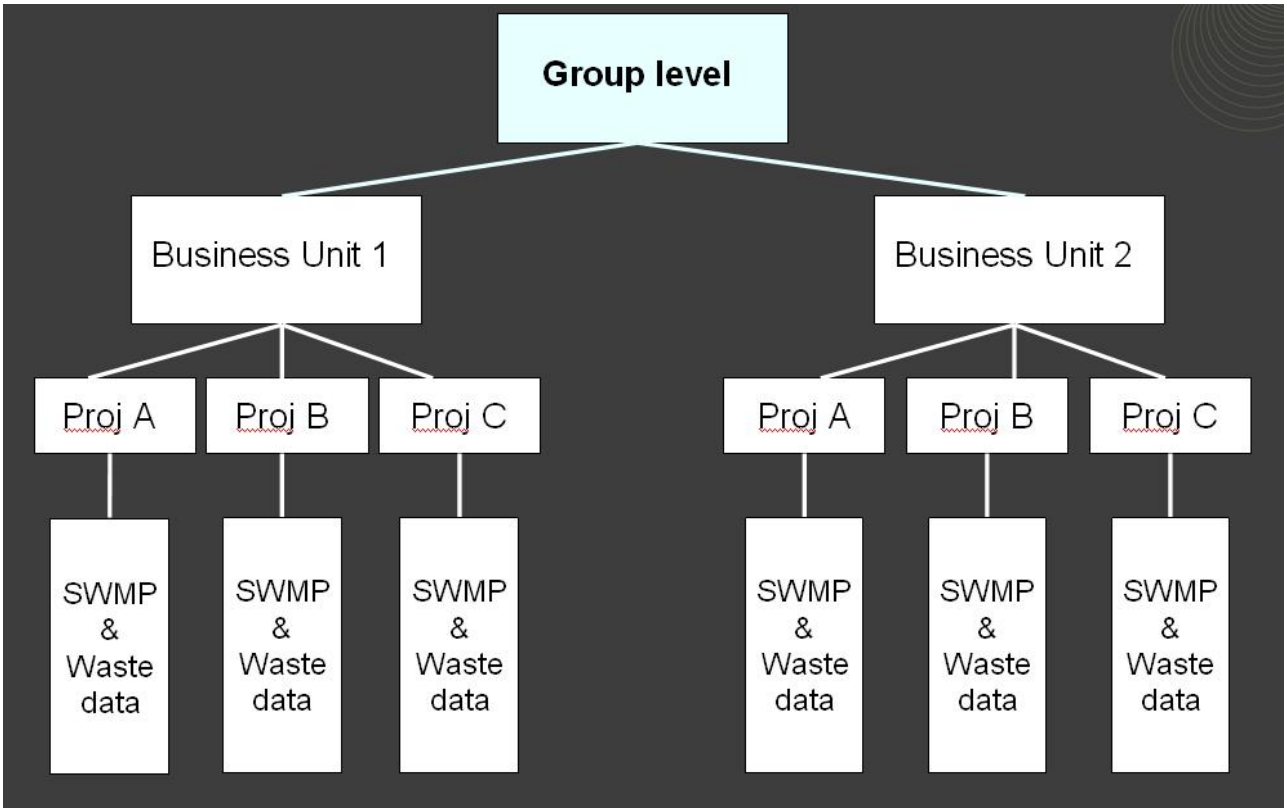
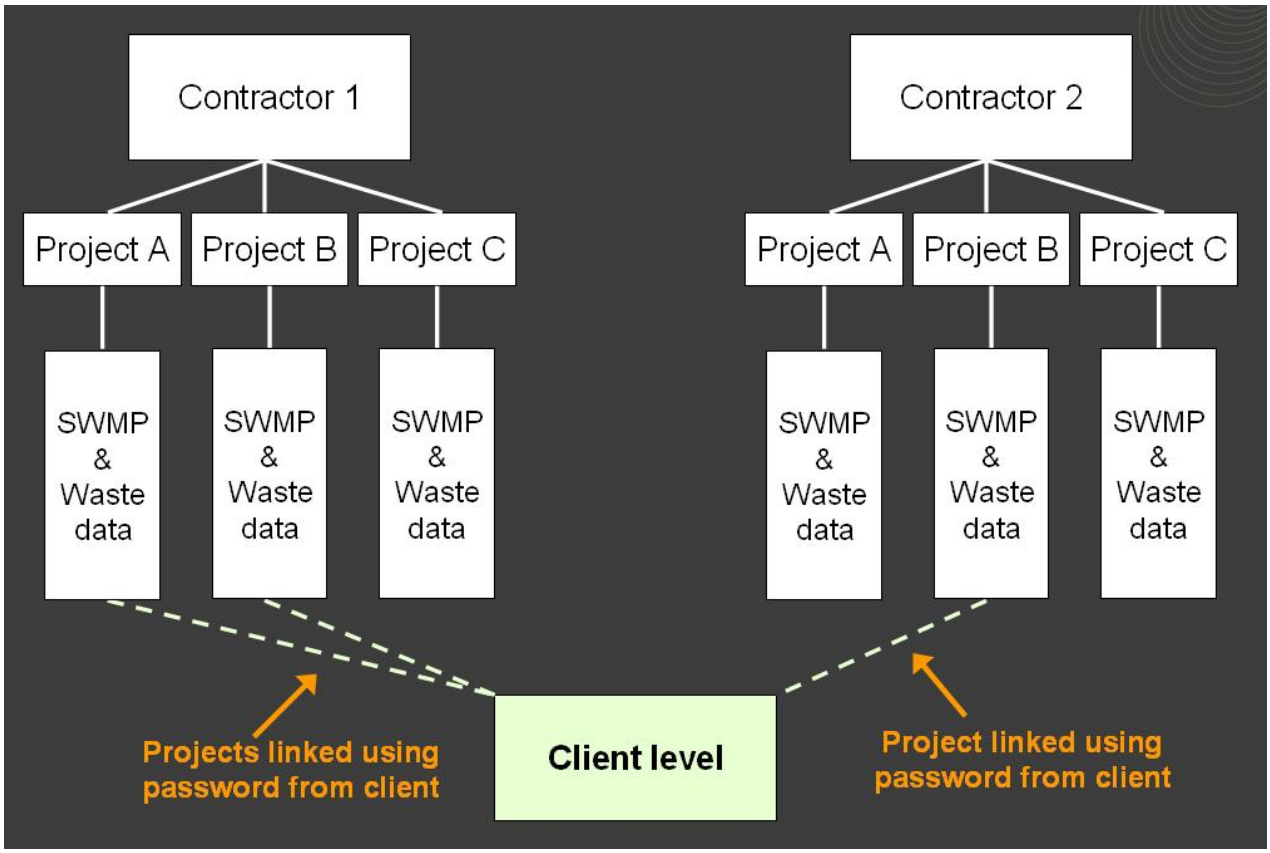


Diagram showing client level account structure



Bespoke versions of SMARTWaste Plan

BRE are able to create a bespoke SMARTWaste Plan for you with additional functions or features that you require. Bespoke versions have their own website which can include branding with your logo.

Bespoke versions of the tool have currently been created for Bovis Lend Lease, Kier, Marks and Spencer, National Federation of Demolition Contractors and Sainsbury's.

For further details and to discuss options and costs please contact us.

Training on how to use SMARTWaste Plan

We run regular training sessions at BRE in Watford which provide an overview of the Site Waste Management Plan Regulations and detailed interactive workshops on how to use SMARTWaste Plan. For further details on the programme, dates of forthcoming training sessions and to book your place online, please visit www.smartwaste.co.uk/page.jsp?id=47

BRE can also provide tailored training for larger groups from one company, either at your premises or at BRE. Both half day and full day training sessions can be provided. Please get in touch to discuss this option and associated costs further on 01923 664851 or 01923 664155 or smartwaste@bre.co.uk.